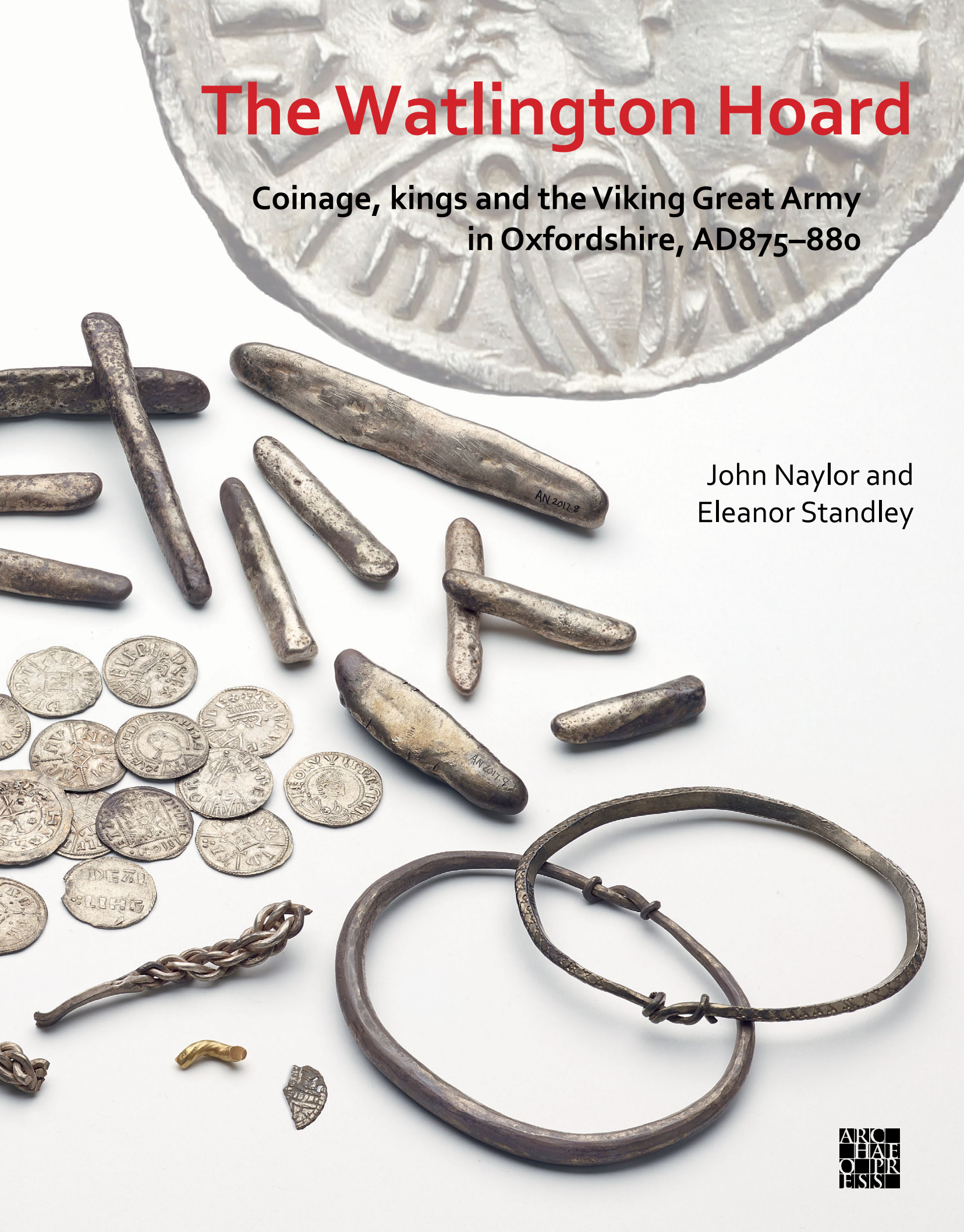
The Watlington Hoard

Coinage, kings and the Viking Great Army in Oxfordshire, AD875–880

John Naylor and
Eleanor Standley



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The Watlington Hoard

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John Naylor and Eleanor Standley

with contributions by
Ryan Lavelle, James Mather, Emma Corke, Philippa Pearce, Alexandra Baldwin, Helen Ward, Jane Kershaw, Simon Coupland and Julian Baker

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List of Contributors

Julian Baker, Curator of Medieval and Modern Coins and Related Objects, Heberden Coin Room, Ashmolean Museum, University of Oxford.

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Simon Coupland, Affiliated Scholar, MacDonald Institute for Archaeological Research, University of Cambridge.

Jane Kershaw, Associate Professor, School of Archaeology, University of Oxford.

Ryan Lavelle, Professor of Early Medieval History, Department of History, University of Winchester.

James Mather, Metal-detectorist and Independent Scholar, Reading.

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Eleanor Standley, Curator of Medieval Archaeology, Department of Antiquities, Ashmolean Museum, and Associate Professor of Later Medieval Archaeology, School of Archaeology, University of Oxford.

Helen Ward, formerly Deputy Head of Learning, Ashmolean Museum, University of Oxford, now Digital Learning Project Manager, The British Library.

Acknowledgements

This book forms only a part of the story of the Watlington Hoard, its discovery leading to a great amount of effort by many people in relation to the acquisition, outreach and research projects undertaken since that day in early October 2015. It is hard to know quite where to begin to thank all of those involved but to start with the finder, James Mather, seems most appropriate. James did the right things from the start, reporting his find to his local Portable Antiquities Scheme Finds Liaison Officer, the late David Williams, thus enabling the bulk of the hoard to be excavated and lifted archaeologically. This helped to keep as much information in tact as possible as well as minimising the risk of damage to the coins and objects it contained, many of which are fragile. He has also been incredibly enthusiastic about his discovery and has worked hard giving much of his time for talks and events, and really thinking about what he'd found. We are very glad that James was able to contribute his own personal thoughts on finding the Watlington Hoard to this book (below, Chapter 2). David Williams's contribution, too, was fundamentally important in helping James with the initial discovery and he expertly excavated the hoard as well as undertaking the administration relating to the hoard's reporting under the Treasure Act 1996 for which he deserves our thanks and appreciation. David tragically passed away in late 2017 and it is with great sadness to us that he was unable to write up his work for this book.

The discovery was, of course, entirely unexpected. The initial finds made by James prior to excavation came into the Ashmolean Museum a couple of days later, its importance already apparent to staff in the Antiquities Department and Heberden Coin Room, and a decision to express an interest in its acquisition was quickly made. For this, the museum's director Dr Xa Sturgis deserves profound acknowledgement as this was a significant project to take on unexpectedly in an already busy museum schedule, and for his enthusiasm at acquiring the hoard for the museum's collections. As a mixed hoard of coins and other objects, its contents straddle the responsibilities of two departments (Antiquities and the Heberden Coin Room) and the Keepers of each, Dr Paul Roberts (Antiquities) and Prof Chris Howgego (Coin Room), have each supported the work on the hoard greatly and our thanks to both for enabling this to be done, especially in the time required to bring a publication such as this to fruition. Within the Coin Room, our thanks to Dr Julian Baker (Curator, Medieval and Modern Coins) who not only wrote one of the concluding chapters to this volume but also worked with his volunteers to photograph all of the coins in the hoard – used throughout this volume – and worked on many of the public outreach events. In the Antiquities Department, our thanks to Claire Burton, Bryony Smerdon, Helen Hovey and Ilaria Perzia for their work on the project. Claire Burton (Collections Manager in the department) not only helped with the reinstallation and deinstallation of the hoard on numerous occasions but also attended one of the outreach 'roadshow' events, providing endless enthusiasm and support to curatorial staff.

Outside of these two curatorial departments, staff across the Ashmolean worked extremely hard on the hoard itself and the attendant projects. The Conservation department worked hard on the hoard at short notice and our thanks to all of their staff, especially Stephanie Ward for her work on the initial conservation, and Alexandra Baldwin on the post-acquisition conservation of the hoard. Staff in the Ashmolean's Learning department organised numerous events for the public both within and outside the museum, including Helen Ward (Deputy Head of Learning), Clare Coleman, Clare Cory, Jane Cockcroft, Rowan Guthrie, and Jude Barrett (Learning Officers), and Joy Todd and Caroline Cheeseman of the Joint Museums Volunteers & Outreach team. This work included working with colleagues from the Oxfordshire County Museums Service (OCMS) on regional events around the county. We also need to thank the Development team for all their work during the fundraising; David Gowers for

taking fantastic photographs of the hoard for the publications; Graeme Campbell, Byung Kim and Greg Jones in the Design department for their work on the multiple displays and advertising; the Registrar's Office for their hard work facilitating the numerous loans; Declan McCarthy in Publications and Claire Parris in the Press Office; and the Facilities and Security teams. Our thanks also to Carol Anderson, Museums Service Manager at OCMS for her help and support in helping to make these events such a success. We also thank Jeff Wallis for his archaeological illustrations of the objects, his enthusiasm and interest in the material, and for continuing the work during the COVID-19 pandemic during 2020. This broad-based Watlington Hoard project, which includes this publication, has been project-managed for the Ashmolean by Anna Jones who has helped enormously in bringing everything together, including in organising the conference on the hoard at the Ashmolean in November 2018. That all of these outreach events were remarkably successful is a testament their hard work and expertise.

Staff at the British Museum also deserve our thanks. Both the Portable Antiquities Scheme (PAS) and the team who administer the Treasure Act 1996 are based at the museum and were a fundamental part of the whole process. Ian Richardson and the Treasure team provided invaluable advice to us throughout the acquisition process including working with the Ashmolean's Registrars to bring the hoard to Oxford on loan from the DCMS while we ran the public appeal for its acquisition. One of us (JN) is part-funded by the PAS as their National Finds Adviser for Early Medieval and Later Coinage, and Prof Michael Lewis, Head of the Scheme, has been supportive and willing for him to work on this publication over the last 2 years to bring it to completion for which we are very grateful. We would also like to thank Dr Gareth Williams of the British Museum's Coins and Medals department who was involved with the hoard soon after its discovery and wrote the report for the coroner on the coins excavated and sent to the British Museum (see Chapter 2) as required under the Treasure Act 1996 (Ager *et al* 2016). Gareth co-authored a book on the hoard with JN, produced at short notice for the acquisition appeal (Williams and Naylor 2016), and discussions with him on 9th-century coinage and Viking hoarding were always informative and useful. Any errors or omissions on these topics obviously remain our own. Gareth had intended to provide the final discussion for this book, and gave a paper at the Ashmolean conference in November 2018, but unfortunately was unable to write this up for publication in the end.

Our thanks are extended to the authors who have all contributed to this book, exploring the story of the Watlington Hoard and its world, both historical and in the present day. Most of the papers contained here were first presented at the Ashmolean conference in late 2018 and we are also grateful to Alexandra Baldwin and Simon Coupland for their contributions which were commissioned at a later date. The two peer reviewers of the book provided excellent, detailed comments and suggestions which have helped to make this a more rounded and better volume, and they deserve our thanks for this work. Any errors remain the responsibility of the authors. Our thanks also to Ben Heaney and David Davison at Archaeopress for their help and advice throughout and for producing a lovely final product!

Finally, the hoard would not have been acquired by the Ashmolean Museum if it were not for the many kind donations made by members of the public and other donors. We are extremely grateful to the National Lottery Heritage Fund (NLHF), The Art Fund (with a contribution from the Wolfson Foundation) and the Ashmolean Friends and Patrons who all provided grants to help us to bring the hoard into our collections. The pivotal NLHF grant also provided funds for our outreach projects including this publication.

John Naylor and Eleanor Standley, Oxford, May 2021

Foreword

Xa Sturgis, Director of the Ashmolean Museum

This monograph on the Watlington Hoard is the culmination of over five years of research and public engagement events that have taken place since this nationally important find was discovered by the metal detectorist James Mather near Watlington, Oxfordshire in 2015. The Hoard is one of the Ashmolean's most exciting and important acquisitions in recent years: coins, silver and gold that shed fascinating light on a key moment in the history of England. It now sits within the Ashmolean's Anglo-Saxon collections, alongside the world-famous Alfred Jewel.

Following his discovery of the hoard James Mather reported his extraordinary find to the Portable Antiquities Scheme. It was excavated and declared Treasure (under the Treasure Act 1996) by the Oxfordshire coroner. The Ashmolean and the Oxfordshire County Museum Service (OCMS) then had the opportunity to acquire the Hoard. Working together the two institutions formed a joint proposal to promote the hoard, plan public engagement and knowledge-exchange programmes in the county, and to fundraise the £1.35 million needed for the acquisition. The Ashmolean was to be the final destination for the treasure, and it is now curated jointly by the Antiquities Department (non-numismatic objects) and the Heberden Coin Room (the coins).

I am profoundly grateful for the grants from the Heritage Lottery Fund, the Art Fund (with a contribution from the Wolfson Foundation), the Ashmolean Friends and Patrons; and for the generous support from many members of the public and the people of Oxfordshire who made the acquisition possible and for supporting the programme of exhibitions and public engagement which accompanied it, of which this volume is one part. It has also been a great pleasure to have worked closely with the staff at the OCMS, Oxfordshire Play Association and Oxfordshire Libraries, as well as those outside the county in the British Museum, Nottingham Lakeside Arts, and the JORVIK Viking Centre, York. I am immensely grateful to all those who have been involved in the project and who have contributed to this volume.

These are uniquely challenging times. As I write we have once again had to close the Museum to help in the government's efforts to control the COVID-19 pandemic. Archaeological finds such as the Watlington Hoard remind us of other periods of national emergency and indeed of our capacity to overcome them. Within the collections of the Ashmolean are countless objects and works of art that help us reflect on humanity's response to and resilience through moments of crisis and in doing so help our own resilience, sense of connection and understanding. The small delicate fragments of the Watlington Hoard, buried and then found centuries later are testament to how archaeological finds can shed unexpected light on our shared past, changing our understanding of Oxfordshire's past during another uncertain time, but also the national history of a united kingdom.

List of Abbreviations

ASC *Anglo-Saxon Chronicle*; text in Plummer 1892–99; trans. in Whitelock *et al.* 1965

EMC Corpus of Early Medieval Coin Finds < https://emc.fitzmuseum.cam.ac.uk/>

PAS Portable Antiquities Scheme <http://finds.org.uk>

PASE King's College London and University of Cambridge, *Prosopography of Anglo-Saxon England* <http://www.pase.ac.uk>

S P. H. Sawyer (ed.), *Anglo-Saxon Charters: An Annotated List and Bibliography*, Royal Historical Society Guides and Handbooks, 8 (London, 1968); revised version ed. S. E. Kelly, R. Rushforth *et al.*, for the *Electronic Sawyer: Online Catalogue of Anglo-Saxon Charters* website, King's College London http://www.esawyer.org.uk

SCBI Sylloge of Coins of the British Isles

tpq *terminus post quem*

Chapter 1

Introduction

The hoard that forms the focus for this book was discovered on farmland in the vicinity of the small Oxfordshire town of Watlington in October 2015. It consists of 203 coins, most of which were issued by the early-medieval kingdoms of Wessex and Mercia in the late 870s, and silver ingots and metalwork — some in the form of fragmented hack-silver and a single piece of hack-gold. The metalwork and ingots provide connections to Scandinavia and the Vikings, while the coin-dating points to a formative period in the late 9th century when the Viking Great Army was raiding across Wessex and finally faced defeat against Alfred the Great in 878 at the Battle of Edington (Wiltshire). It is undoubtedly a highly significant find, not least because it is the first such hoard from the Upper Thames Valley, and its value reaches far beyond Oxfordshire and the 9th century.

This volume has drawn together specialist chapters with the aim of presenting the contents of the hoard and its economic and political significance, as well as the hoard's more recent history which includes its discovery, conservation and use in public engagement. While the former topics are typical for a research publication the latter highlights that the Watlington Hoard is not only an ancient artefact but also has its own modern history, which is too-often part of the story that does not reach the pages of scholarly publications.

The hoard was discovered by a metal-detectorist and was processed through the Treasure Act 1996; but the existing relationship between the finder, James Mather, and archaeologists in the Ashmolean Museum and the Portable Antiquities Scheme was important in the process of reporting, understanding the findspots of the disturbed hoard, and the final excavation. This is just one of the many links that has been built up between responsible metal-detectorists and archaeologists since the Portable Antiquities Scheme started recording finds in 1997. The experience of James Mather is important here as is the discussion of the archaeological methods employed to excavate and lift an in-situ hoard, as presented by Mather and Corke (Chapter 2, sections 2.1 and 2.2). The conservation work undertaken at two institutions (the British Museum and Ashmolean Museum) as part of the remit of the Treasure Act 1996 and after its acquisition by the Ashmolean, is described by Pierce and Baldwin in Chapter 2, sections 2.3 and 2.4, and highlights the careful and varied behind-the-scenes work which is undertaken away from the spotlight in all museums. The modern context of the Watlington Hoard also includes its role in museum displays and how such finds can be used in outreach. The success of this work is an indication of the ability of archaeological discoveries and subsequent research into life, identity and power of the past to continue to captivate the enthusiasm of the public, and is an aspect that we wish to promote in Chapter 2, section 2.5 (Standley with Ward).

Such interest in and willingness to support archaeological acquisitions is also recognisable in the fact that the discovery of the Watlington Hoard coincided with a flurry of other Viking-Age hoards unearthed in Britain between 2004 and 2015, many of which are now in museum collections. Large hoards of metalwork, coinage and hack-silver such as those from the 'Vale

of York', 'Silverdale' and 'Galloway' have received international media attention and other smaller groups of objects, such as the Huxley and 'Furness' hoards, garnered national interest (e.g. Graham-Campbell and Philpott 2009; Ager and Williams 2011; Williams 2011a; Ager 2020). These hoards are complemented by the many individual but contemporary precious metal ingots, jewellery and coinage that have been found. Most of the discoveries have come to light by hobbyist metal-detecting, and the mandatory reporting of hoards and precious metal objects under the Treasure Act 1996 (England, Wales and Northern Ireland; HM Government 1996) or the Treasure Trove system in Scotland (Queen's and Lord Treasurer's Remembrancer 2016).

Together, these hoards and stray finds provide an important corpus of material for study. Where the Viking-Age finds can be closely dated — generally only through the presence of coinage — it places most of them within the first half of the 10th century, generally to the period *c.*900–30 (Williams 2009: 73–74). Virtually all have been found north of the line which can be drawn between the Rivers Dee/Mersey and Humber. This perhaps represents the connections between York and the Dublin/Irish Sea routes of the period (Williams 2009: 78–79; see Kershaw, Chapter 7, Figure 7.13). In comparison, the Watlington Hoard is something of an outlier, both in its date of deposition around the late 870s/early 880s and in its findspot. As one of few large Viking-Age hoards from southern Britain this means that it has the potential to answer a different range of questions whilst contributing to the broader exploration of silver economies in the Viking Age, an area of study for which important new work has been undertaken in recent years (e.g. Graham-Campbell and Williams 2007; Graham-Campbell *et al* 2011; Kershaw 2017).

The approach taken in this book is intended to explore the Watlington Hoard in a number of ways. The underlying historical and archaeological context of the hoard's deposition is as important to consider as its contents. Understanding the evolution and formation of early-medieval settlements, and the political context of these developments, are important aspects in the interpretation of the hoard's burial location. Similarly a discussion of the broader landscape into which it was buried provides further context as this was an area encompassing the River Thames, the ancient east-west route of the Icknield Way and the traditional boundary between Mercia and Wessex. Chapters 3 (Naylor) and 4 (Lavelle) provide this contextual exploration of the region and reflect on the hoard's location in a dynamic zone of communication, trade and settlement, and where the Mercia–Wessex relationship was visible and memorialised in the landscape.

The contents of the hoard are obviously highly significant in their own right, and their publication is a central part of this book (Catalogues 1–2). The coinage, especially, is an extremely valuable new source of material and is considered in detail by Naylor (Chapters 5 and 6) and Baker (Chapter 8). The coins, struck by Alfred of Wessex (871–99), Ceolwulf II of Mercia (874–79?) and Archbishop Æthelred of Canterbury (870–89), are rare jointly-issued types, and the most recent analysis prior to the discovery of the Watlington Hoard was undertaken in the late 1990s (Blackburn and Keynes 1998). This new corpus of coins in the Watlington Hoard allows fresh analysis of the main types issued in the late 870s — the Two Emperors and Cross-and-Lozenge — and can advance our understanding of both. In addition, the sheer number

of coins in the Watlington Hoard is such that new, detailed discussion of the organisation of minting, the structure of the coinage and its chronology is possible.

The other objects in the hoard — the ingots, jewellery and hack-metal — are a large and important group and are considered by Kershaw in Chapter 7. The early date of the pieces makes them a significant new form of evidence for the connections with Scandinavia in the mid to late 9th century during the period that the Viking Great Army was moving across Britain. Recent archaeological research has done much to advance our knowledge of the nature of their camps and associated activity across parts of the Midlands and northern England, and the Watlington Hoard — and other data from the region — may inform on the debates focussed on southern England (see Hadley and Richards 2016; 2018).

From the time of its discovery, the potential links between the Watlington Hoard and the Viking Great Army have formed an important part of the interpretation (Williams and Naylor 2016: 13–22; 29–30). The hoard's burial around the end of the 870s places it after the Battle of Edington in 878 which marked the last phase of the Viking raiding and conquest of the preceding decade or so, and initial work on the hoard suggested it may have been buried as the Viking Great Army moved away from Wessex towards East Anglia following their defeat at Edington and overwintering at Cirencester (Williams and Naylor 2016: 29–30). In Chapter 9, Naylor's final discussion provides a culmination of the Watlington Hoard's current interpretation where he considers the acquisition, use and deposition of the contents, and how Watlington, together with other hoards and stray finds can be related to warfare, politics and shifting power. No doubt future research on the hoard and further discoveries from the 9th century will expand our knowledge and understanding of this dynamic period.

Chapter 2

The Watlington Hoard uncovered: from discovery to acquisition and beyond

Introduction

The hoard of precious metal objects and coins known as the 'Watlington Hoard' was discovered on the afternoon of 8 October 2015 by James Mather while he was metal-detecting on land in the Watlington area of southern Oxfordshire. After contacting the Portable Antiquities Scheme's David Williams, Finds Liaison Officer for Surrey and East Berkshire, James stopped digging, removing only those objects which had already been disturbed. These he deposited at the Ashmolean Museum in Oxford, and the rest of the hoard was excavated by David the following week and taken to the British Museum.

As a find of precious metal over 300 years old, the hoard came under the remits of the Treasure Act 1996 and was reported to the Oxfordshire Coroner via the Portable Antiquities Scheme (PAS) as potential Treasure. A report for the coroner was produced by John Naylor (Ashmolean Museum), Gareth Williams and Barry Ager (both British Museum) (Ager *et al.* 2016), and it was declared Treasure by the coroner in February 2016 meaning that it formally belonged to the Crown and could be acquired by a museum. Following its valuation, the hoard was acquired by the Ashmolean Museum in early 2017 after successful grant applications and a public appeal which included the publication of a short booklet on the discovery (Williams and Naylor 2016).

Hoards including Viking or Anglo-Saxon objects are of great public interest and the Watlington Hoard is no different, especially given the presence of so many coins of a historical figure as well-known as Alfred the Great of Wessex. Unveiled to the public at the launch of the Treasure Annual Report 2014 on 10 December 2015 at the British Museum, the hoard made headlines nationally and internationally, including in the press and on television. The significance of the discovery lead to its inclusion on the BBC's *Digging For Britain*, a TV series highlighting major excavations and important finds each year.

The individual contributions in this chapter chart the hoard's journey from its discovery to the public outreach projects following its acquisition, providing both personal and behind-the-scenes insights into its recovery and conservation which are rarely glimpsed by the public or within scholarly publications but which, nevertheless, form a vital part of their story. The outreach projects which often accompany major museum acquisitions are also a critical part of their promotion to the public, and the very tangible success of the Ashmolean Museum's broader Watlington Hoard project provides an excellent case study. It is important to also note that the report of the excavations is here written by Emma Corke who assisted David Williams on site. Sadly, David passed away suddenly in late 2017 before he was able to write his report; we are grateful to Emma for bringing together David's notes and drawings from the excavation to produce the report included here.

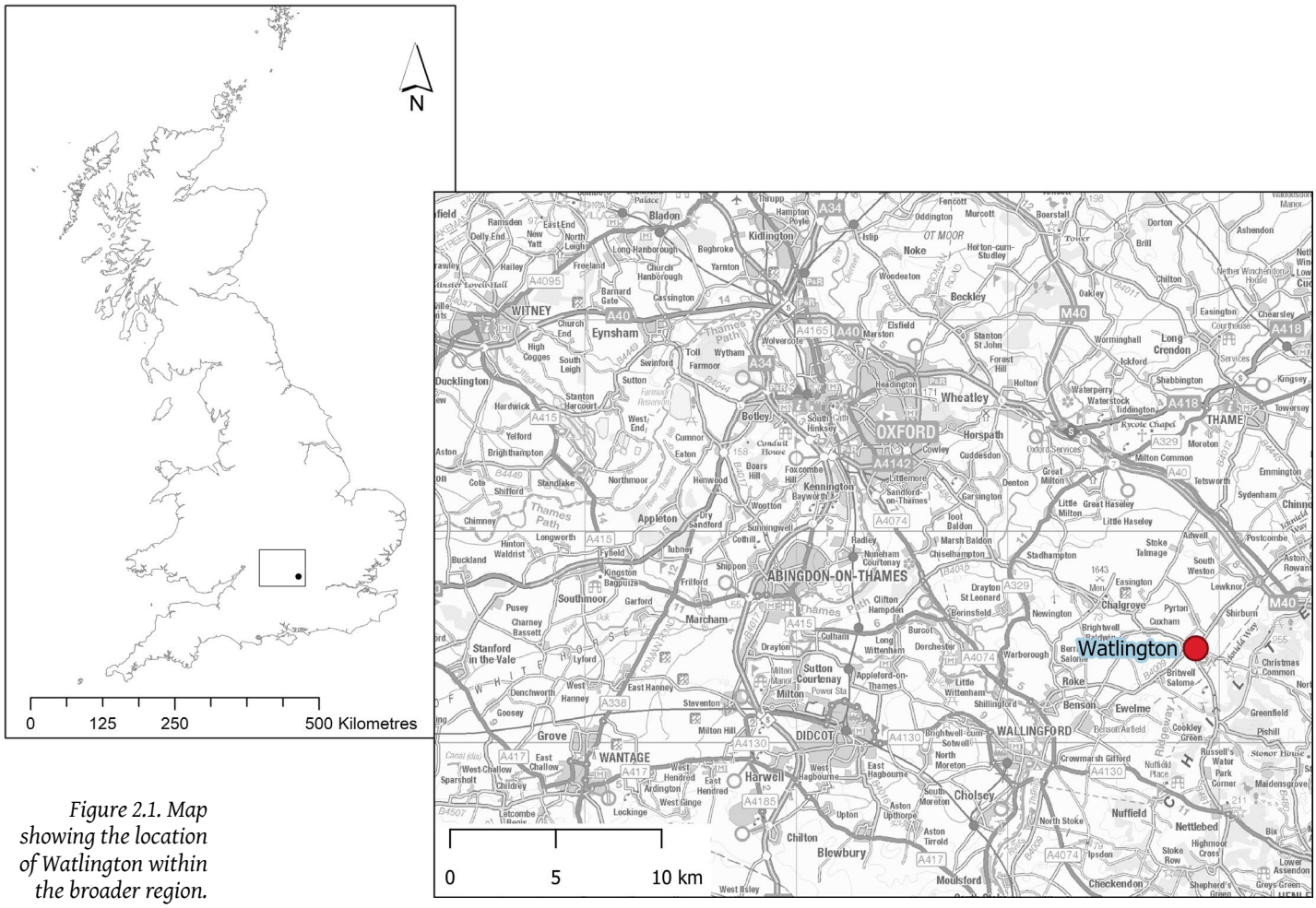


Figure 2.1. Map showing the location of Watlington within the broader region.

A note on the findspot of the Watlington Hoard

The Watlington Hoard was found on land in the 'Watlington area' (Oxfordshire; Figure 2.1), and this terminology requires some explanation. For reasons of security and worries that the site may be raided by 'nighthawks' (criminals trespassing on a site without permission to illegally remove archaeological finds using metal-detecting equipment) it was decided that the exact location of the Watlington Hoard's findspot could not be made public. This location is known to and recorded by both the Ashmolean Museum and by the PAS, the latter central to the hoard's recovery. The term 'Watlington area' does not necessarily mean that the find was made within the parish of Watlington but should be considered as somewhere within an undefined broader zone around the town. The hoard is also recorded on the PAS's database under record number SUR-4A4231.

2.1 FINDING THE WATLINGTON HOARD

James Mather

On 8 October 2015, I was fortunate enough to discover the Watlington Hoard whilst out metal detecting. In brief, here is the story of this exceptional find, covering events up until its archaeological excavation. To help with context I have also included some information about myself and the site, the exact location of which continues to remain confidential, as well as acknowledgements and thanks to the many experts and supporters who have assisted me throughout this dramatic process.

I've been practising my hobby of responsible metal detecting on and off for over 25 years, both as an individual and as a member of Maidenhead and Wessex metal detecting clubs. Little did I suspect when I started that one day I would be helping to excavate one of the most significant and valuable hoards ever discovered in Britain.

In that period, which has involved visiting in excess of 150 sites, I've dug up vast amounts of rubbish – drink can ring-pulls, shotgun cartridge caps and a bewildering assortment of scrap metal – but fortunately it has also included a wide range of archaeologically interesting finds. Many of these have been recorded on the excellent PAS database.

Detectorists today are much better informed than when I started, through TV shows, quality specialist magazines, the internet with its active online forums, the support of the PAS's regional Find Liaison Officers (FLO), Museum 'finds identification' days, and relations with archaeologists that continue to progress from strength to strength. I am, perhaps unusually, also a member of an archaeology club in Marlow, and have attended numerous archaeology-orientated courses via Oxford University's first-class Continuing Education programme.

Figure 2.2. A view of the field where the Watlington Hoard was discovered.

The point about all this is that, in common with many of my fellow hobbyists, I believe myself to be a responsible, experienced and informed detectorist. If I am to be any good at what I do, it's essential that I know what I'm finding, which could range from a Lower Palaeolithic hand axe – an 'eyes only' find – to a World War II mortar bomb and everything else in between! In addition, familiarity with the *Code of Practice for Responsible Metal Detecting in England and Wales* (Portable Antiquities Advisory Group 2017) and the law relating to the Treasure Act 1996 is a must. As I think you will agree, when reading on, the above factors played no small part in the Watlington Hoard's successful discovery and excavation.

The site

Whilst the site's location remains confidential, it lies in southern Oxfordshire, near the charming town of Watlington which is close to several potentially relevant ancient ridgeways (Figure 2.1). The field itself is long established agricultural land, currently in arable use, and regularly cultivated and ploughed (Figure 2.2). There are no significant features observable in this field and no discernible crop marks. Whilst I would love to be able to claim that years of in-depth academic research led to this discovery, the reality is that I was in the field because it belonged to a farm where I had permission to detect, and it was in good detecting condition, i.e. recently ploughed, moist and rolled flat. I had detected in this field (and several others nearby) a few times before with mixed results, and made finds from various ages, but no other early medieval material had emerged. It is clear therefore that chance played a significant part in both this hoard's survival, and discovery.

Discovering the hoard

The date is Thursday 8 October 2015 and I've been detecting for five hours. It's not looking good – a pocketful of scrap and minimal finds (a couple of broken crotal bells, worn Georgian halfpennies and a severely corroded Roman *dupondius* coin). At least it hasn't been raining, but I'm still getting fed up, and decide it's time to head for home.

Figure 2.3. The first silver ingot upon discovery.

Making my way back I notice an area of higher ground that I haven't detected on before — such ground is attractive to detectorists as it is often more likely to be a settlement or work site, given the advantages of better defence, views and drainage. With this in mind I begin a zig-zag search pattern that is a good way of efficiently covering unexplored areas for the first time.

Sure enough, after a few minutes, I receive a strong, high quality signal. Digging down about seven inches (*c.* 20cm) I uncover a flat, silvery cigar-like object, about three inches (*c.* 7.5cm) long, unlike anything I believe I've seen before. It looks like ancient silver and is heavy so I take a quick photograph (Figure 2.3) and put the object in my top pocket. Whilst walking away, I have nagging doubts about what this is — *then an 'epiphany' moment*! I realise that I have seen something like this previously — Viking ingots from the Cuerdale Hoard in the British Museum, which I had visited a year ago. I retrace my steps and, finding the original hole, decide to conduct a serious grid pattern search of the surrounding area — OK I'm not in York, or somewhere where I think the Vikings may have been active — but you never know...

Figure 2.4. The first silver penny upon discovery, a Cross-and-Lozenge type of Alfred the Great (see cat. 2.178 *for the full details of this coin).*

Then, about 12 feet (*c.* 3.5m) away, another very good signal, stronger and bigger than before. I carefully dig a small hole and scrape the soil away by hand. There it is — a bright, muddied, early 'hammered' silver penny — one that I'm certain is Viking or Anglo-Saxon (Figure 2.4). Serious excitement and focus now. Heart and mind racing. A probable Viking ingot and a definite Anglo-Saxon/Viking coin, what's more, this is a big signal and small single coins don't make big signals. More careful scraping and then I reveal a mass of silver coins about nine inches (*c.* 25cm) down around the base of the plough pan (Figure 2.5). Shock, excitement, joy, awe — a hefty shot of adrenalin that seems to make time stand still. This can't be happening, especially not to me!

Very quickly though, the questions start. Which kings are represented? Are the coins real? What else may be hidden here? And yes, what might they be worth? But more importantly, given that this is most likely a significant treasure find, what is the right thing to do next? I phone the farmer who is working nearby, and then, following a brief discussion on site I ring David Williams, the PAS's Surrey and East Berkshire FLO for further advice (Anni Byard, the

Figure 2.5. The first group of silver pennies uncovered and removed prior to the excavation of the remainder of the hoard.

local Oxfordshire and West Berkshire FLO, being away). David is clearly excited by news of the find and, despite a technological meltdown my end compromising communication (my ageing iPhone is struggling with the signal, an almost flat battery and limited credit), he tells me he will come out and excavate the hoard formally, at his earliest opportunity. Unfortunately however, that will not be for five days, given previously booked commitments.

My heart sinks, as the site, although relatively remote, cannot be secured effectively in the interim. In the following conversations I am advised to stop digging and it's agreed that I can very carefully remove the exposed coins, some already fragmentary from likely plough damage, together with several artefacts (there is no surviving container I can see). The most appropriate thing to do next is simply to fill in the hole, mark it discreetly and leave. The idea of parking farm machinery on top of the remaining hoard is discussed and rejected, given the attention it might generate and the potential risk of compression damage to what are likely to be more extremely fragile and relatively shallow coins.

I duly backfill the small hole, which continues to produce a very substantial detecting signal, place a discreet pile of stones nearby to act as a marker and reluctantly walk away (Figure 2.6). So begins the longest wait of my life...

At home that evening, I gently rinse the coins under the tap to remove the friable mud. Whilst still muddy, some of the coins look identifiable but I struggle to identify them in my copy of Spink's *Coins of England and the United Kingdom*. There is a reference to some King Alfred 'Two Emperors' type coins that seem to fit and, on seeing the potential value of these, I immediately resolve to take the 88 extracted coins and several artefacts to the Ashmolean Museum the following morning for safekeeping. On arrival, I'm pleased to say my delivery produces a 'Wow' from the staff in the Heberden Coin Room, and confirmation that these are indeed very rare coins of Alfred The Great and Ceolwulf II.

For the next five nights I hardly sleep at all, and each day I go back to the site to check that it has not been disturbed. On Tuesday 13 October I turn up early to check the site for the final time before David Williams and his expert assistant, Emma Corke, arrive. Huge relief, as all is in order, although it takes me a worryingly long time to find my marker stones! At around 9am, the excavation begins (Figure 2.7), and the rest, as they say, is history...

Figure 2.6. A marker of three stones placed discreetly over the hoard. It would not be excavated for another five days!

Postscript: some acknowledgements and thanks

I have been exceptionally lucky to find such an amazing hoard, one that is extremely significant archaeologically and has been successfully acquired in its entirety on the nation's behalf by the Ashmolean Museum. That part of the journey has taken around 16 months, but in reality the process started much earlier for me and I would now like to take this opportunity to thank all those involved:

Firstly the landowner, and for that matter all other landowners and farmers nationwide that support the hobby of responsible detecting. Without their permissions there would be no land available, no detecting and correspondingly far fewer archaeological finds and treasure.

Next, David Williams and Emma Corke for their most professional excavation. David is tragically no longer with us, but I will always appreciate his commitment, support and in-depth knowledge, especially on all things Anglo-Scandinavian. His sound advice to me at the time of discovery was critical to the successful excavation — wisdom that I readily share with other detecting colleagues, to good effect. As a FLO David was part of the PAS, and I must also thank the entire PAS team, Treasure Department and many experts at the British Museum for their skill and patience in their dealings with me.

Figure 2.7. The finder, James Mather, and the exposed hoard (centre of trench between the two scale bars), the arm-rings, some ingots and a few coins visible, poking out of the earth.

I would also like to highlight the Ashmolean's massive role in this endeavour. Their team achieved the Herculean task of raising the funds to acquire the hoard with a multi-faceted programme of activity and substantial grants from bodies including the National Lottery and Art Fund as well as the generosity of the public and many enthusiastic Watlington residents. Additionally, this museum's encouragement of my detecting that began as far back as 1993 has been exemplary, with informative and supportive find related communications to me from many Ashmolean luminaries, past and present, and this continues with John Naylor and his colleagues to this day.

Last, but definitely not least, a big acknowledgement to the most important person(s) related to this hoard. This is, of course, the depositor. It is highly unlikely that detailed identities or circumstances will ever be known, but may he, she or they either rest in peace, or perhaps more likely, continue to enjoy their revels in Valhalla!

2.2 THE EXCAVATION AND LIFTING OF THE WATLINGTON HOARD

Emma Corke

The Watlington Hoard was excavated by David Wynn Williams FSA, the PAS's FLO for Surrey and East Berkshire, and the author. This report is based on David's brief report to the PAS, and my own observations. It would of course have been written by David, if it were not for his sudden death.

On the afternoon of Thursday 8 October 2015 David received a telephone call from James Mather. On hearing James's description of what he had found — at that stage several dozen coins and some silver ingots — David agreed that the find was very probably a hoard, and strongly advised that James should stop digging, and that he would arrange an excavation of the suspected hoard at the earliest opportunity. James back-filled the hole he had dug (placing some crotal bells in it to aid re-discovery). Over the succeeding days he revisited the site to check that it remained undisturbed.

Unfortunately it was not possible for David to arrange an excavation for several days, which gave James some anxious hours, but early on Tuesday 13 October David and I arrived to investigate the find. We had worked together on many sites, largely for Surrey Archaeological Society, for whom we had both been site directors. I have a quite extensive experience of block-lifts and over the years had assisted David in the excavation and lifting of hoards of many periods.

On arrival James's original excavation of the find-spot was visible, as were the positions of the find-spots of two more silver ingots, found since the original discovery. These ingot find-spots were about 4.6m and 4.15m to the east of the first find; their positions were later plotted onto a sketch plan to relate their position to the bulk of the hoard (Figure 2.8). A coin fragment was recovered lying between the hoard deposition site and the ingots.

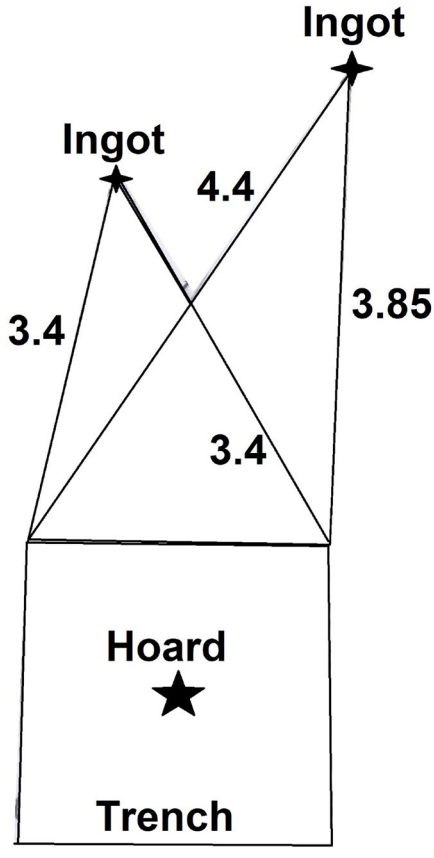


Figure 2.8. Sketch plan showing the positions of separated ingots in relation to the hoard and trench.

Aims of excavation

The aims of such excavations fall into two parts. The first set of questions to be answered relate to the deposit itself:

1. What is the extent of the deposit?
2. Was it deposited all at once, or over time?
3. Is it as deposited or has it been disturbed since?
4. If as deposited, was it placed in a container (e.g. box, bag or ceramic vessel)?
5. Is there any structure within the deposit (e.g. several containers, different types of objects in different areas)?
6. If disturbed, by what means (e.g. scattered by plough, partially robbed)?
7. Was it deliberately deposited or is it a chance collection of objects (e.g. objects settled in a depression in the ground)?
8. Is it a hoard by legal definition?

In the case of the Watlington Hoard the answers to 6 and 8 were known before excavation: the deposit had been to some extent disturbed and scattered by plough, and it was, by virtue of the number and date of silver objects already recovered, legally a hoard (although at this point it remained as 'potential treasure' because it could only be declared 'treasure' by the local coroner as part of its path through the Treasure Act 1996). The second set of questions relates to the context of the deposit:

1. Is the deposit in an archaeological feature of some kind (e.g. under a floor, in a wall, in a ditch, within a tree's roots, in a pit)?
2. If not actually within a feature is there such a feature nearby (e.g. placed beside a wall or tree) which might have been intended as a guide for later recovery?

Finally, of course, the aim of such an excavation is to recover the deposit undamaged and in its entirety.

Method

James's backfill of his initial excavated hole was removed, together with the crotal bells he had placed there. The roughly circular hole thus revealed was about 20cm in diameter. At this stage the hole was only cleared to the base of the ploughsoil, and not bottomed, as there was a danger of damaging coins which were now visible at the base of the hole. A small square trench measuring 1.5 x 1.5m was laid out centred on the hole, and the ploughsoil within this area removed by spade, James metal-detecting all the soil removed. The soil was grey humic clay with plentiful small flints varying in size from 2-6cm, with the majority being in the smaller range. The flints were predominantly sharp-edged broken pieces, rather than rounded pebbles, and evidently we were in a geological area of clay-with-flints. The ploughsoil was quite loose, having been ploughed fairly recently, and was wet and claggy. It was surprisingly shallow, being only about 22cm thick, and undoubtedly the Watlington Hoard owes its survival to the lack of deep-ploughing in the field. The presence of the two silver ingots within 5m of the deposit site of the hoard suggests that the plough had only

very recently hit the top of the hoard, possibly even only in the most recent ploughing. The lack of damage to the objects at the top of the hoard as found supports this theory.

Once the ploughsoil had been removed from the trench the subsoil forming the base of the trench was trowelled clean, revealing a compact flints-with-clay surface of a uniform brown/grey colour, with the exception of a slightly darker area to the north of James's original hole (which at this depth was about 10cm in diameter). At this point, with access now easier, the rest of the backfill of the hole was removed. The trench was then divided into quadrants (or quarters) by string, and the opposing northern and southern quadrants were excavated, working inwards from the trench edges (Figure 2.9).

This technique is designed to expose any features in section as well as plan, and thus gives a better chance of seeing anything that may be difficult to discern. It was devised for the excavation of large (circular) pits, and the use of the term 'quadrant' rather than 'quarter' comes from this application of the technique. In Figure 2.9 the deposit is brown and showing in section in four quadrant edges (two are visible in the figure) and in plan on the surfaces of the two un-excavated quadrants. The northern and southern quadrants were chosen to see what the darker area might mean. Immediately below the surface the brown/grey surface of the subsoil became redder and more compact, and it was evident that this was the natural undisturbed geology (it may be noted that this orange/red clay becomes rapidly grey on exposure to the air and cannot recover its original colour). About 10cm of this was removed, the majority by trowel, so there could be no doubt that there was no archaeological feature in these areas. The quadrants were dug (as already stated) from the edges towards James's hole, and not far from the hole the colour changed from red/brown to grey. This was the extent of the small pit dug by the hoard's depositor(s). The darker area within the northern quadrant proved to lie within the depositor's pit, and overlay ingots and coins. The edges of the deposition pit were also just apparent in the sections of the quadrants. They were not easy to see, but appeared to be fairly vertical.

The trench was then photographed (Figure 2.10). Having now a better idea of the extent of the deposit the other two quadrants were excavated to the same depth, but it was not thought necessary to go to the trench edges as this would have merely removed natural. At this level the depositor's pit appeared to be roughly circular, with slight variations of colour within the circle. Finds were not apparent within all of the pit. After more photographs David did a quick drawing of the trench (Figure 2.11), and it was at this point that the positions of the two ingots found nearby were plotted in by their relationship to the trench (Figure 2.8).

The hoard itself and its immediate area were then defined and cleaned, using plastic tools where it was necessary to touch any silver in order to avoid scratching or otherwise damaging the finds. The hoard was then seen as a greyish feature surrounded by orange/brown, roughly rectangular in shape, the eastern and western parts of the circle seen, before proving to be very shallow and not to contain any finds. It was about 40 x 15cm aligned roughly north/south, with coins, ingots and flints throughout (Figure 2.12). The coins were evidently brittle and quite a number were in fragments. In the southeast corner three arm-rings or bracelets had appeared, lying parallel and vertically. It was noticed that the contents were thickly intermingled with

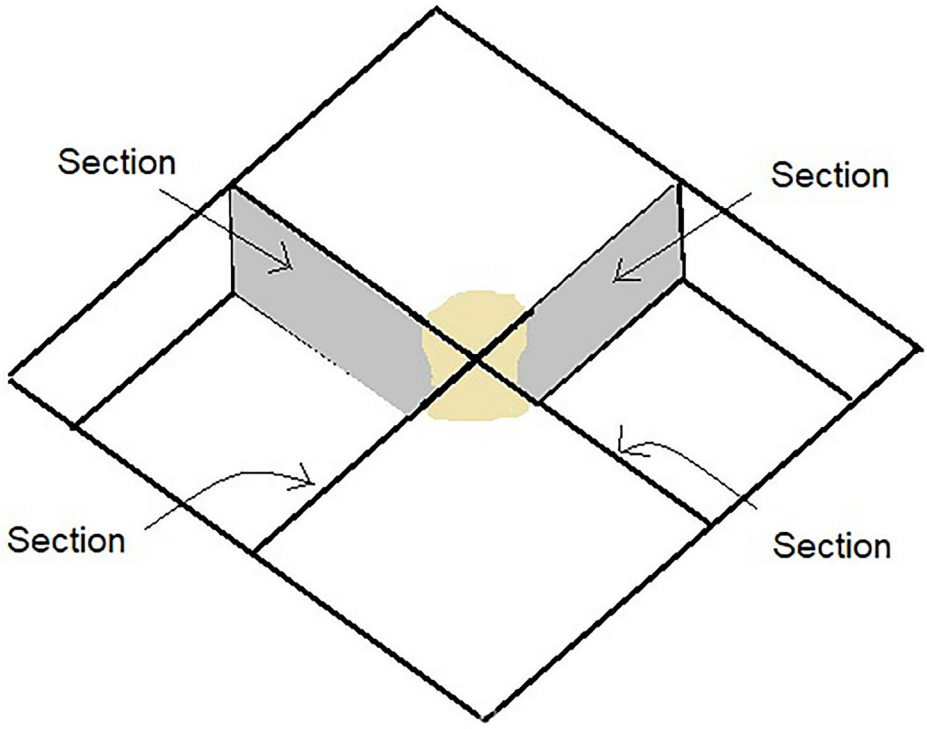


Figure 2.9. The technique of opposing quadrants to investigate pits and deposits.

Figure 2.10. Photograph of the trench with opposing quadrants removed.

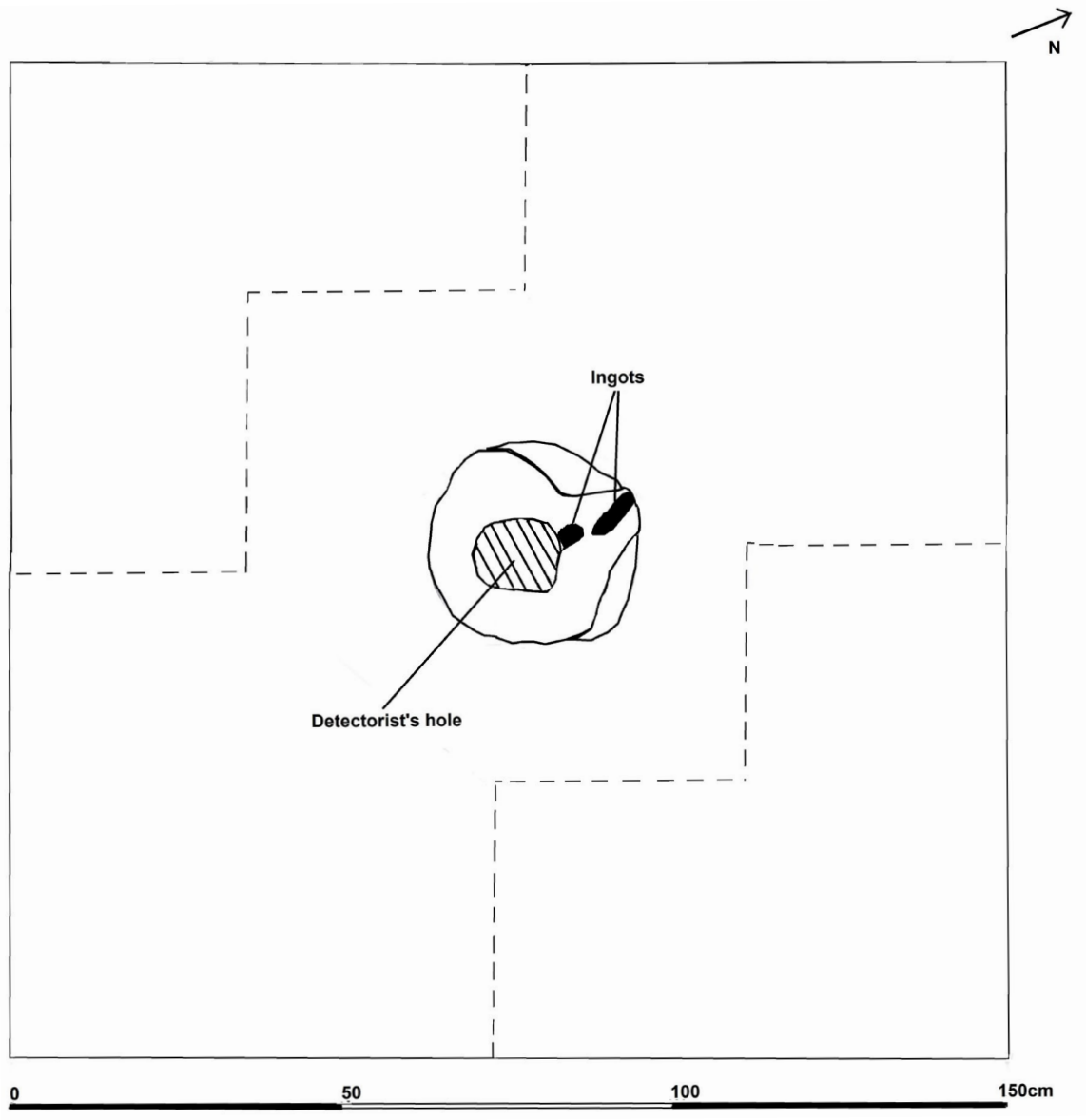


Figure 2.11. Drawing of trench before cleaning and defining the hoard.

Figure 2.12. Photograph of the hoard cleaned and defined.

flints, and that some of these flints were possibly rather larger than those of the surrounding natural. This might suggest that some flints had been laid on the deposit when it was buried, but the evidence was far too slight to be sure of this. What was probably more certain was that the top of the deposit had been scraped by the plough, and this had driven some of the flints deeper and more firmly into the hoard. Around the rectangle of the hoard a few linear smudges of a soft fibrous dark grey/brown material were seen, about on the line where the grey disturbed soil met the undisturbed natural. This dark material was so fragile that it disintegrated on being touched, but what fragments could be recovered were bagged in the hope that it might be possible to analyse it and determine what it was. On site, the best guess was that it might be leather from a bag. The hoard itself was again quickly drawn (Figure 2.13) and more photographs taken (Figure 2.14).

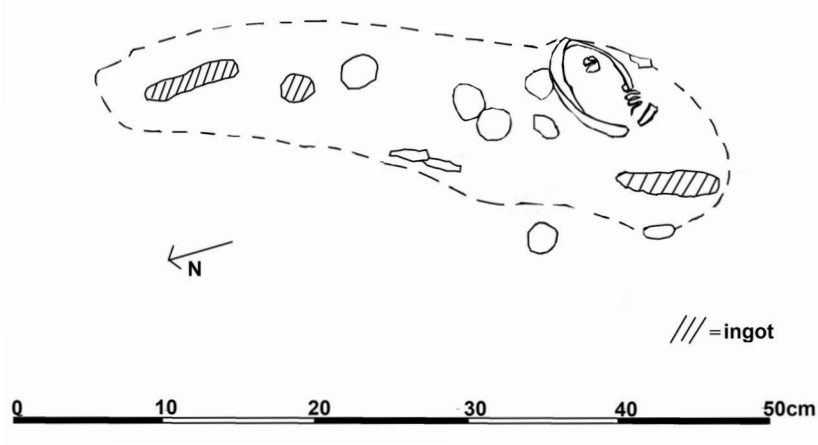


Figure 2.13. Drawing of hoard after cleaning.

Figure 2.14. David Williams photographing the hoard with James Mather looking on.

Defining and cleaning the silver objects, especially the coins, had made it clear that removing the finds from the flints without breaking them would be an extremely meticulous and time-consuming process, and one not suited to a wind-swept icy field with dusk only a few hours away. The decision was therefore taken to block-lift the hoard as a whole. This was not a risk-free strategy as we had no idea at this point of the depth of the hoard, having only seen its top surface. We did however know the dimensions of that top surface, and we knew that it was surrounded by natural (that is, material below soil and subsoil), which we could safely remove without losing any information.

Block-lifting method used to remove the hoard:

1. Excavate around the area to be lifted, removing any non-archaeologically significant context (in our case, natural), leaving the block as an island.
2. When sure that you are below the base of the feature to be lifted, start to burrow underneath the block. Continually check that the block is stable and will not disintegrate. Remove all the surrounding soil you can without risking the structure of the block.
3. Once you have removed all that you safely can, wrap the block as tightly as possible in clingfilm. If possible, make sure before doing this that it will fit into a box or onto a firm base.
4. Rock the block to see if it is loose, if not, dig away a little more below.
5. Once loose, carefully lift the block onto the base and or into the box.
6. If the block contains a lot of water, make a few holes in the clingfilm to prevent condensation turning the base of the block to mud.

The tightly-packed finds, flints and clay of the hoard proved to be very stable, and it was easy to produce a block standing like a glacial erratic on a small base of natural that moved slightly if gently rocked (Figure 2.15). However, in order to make the block small and light enough to handle, the decision was made to remove some of the darker material that filled the outer edges of the depositor's pit, together with some of the traces of the dark fibrous material that surrounded the finds. These traces were bagged. A maximum of 5cm of the pit fill was removed from each edge; in most places more like 2–3cm. Nearly all of the material moved lay between the dark fibrous material and the edge of the pit: no finds lay within this area with the exception of parts of two ingots. These projected well out from the edges of the block, one in the middle of the eastern (long) side, and one at the northern extremity. Their lying beyond the rest of the finds may have been as a result of the removal of the surrounding pit fill, but possibly may have due to their being moved by the plough (they were at the top of the block). Before wrapping the whole block in clingfilm it was necessary to remove these, as pressure on them could have broken apart some of the interior of the block. Leaving them would also have meant that the block would not have fitted into the largest box we had, with the result that transporting it would have been far more risky. Before removing these, photographs were taken from all angles (Figure 2.16).

Figure 2.15. Excavating around the hoard to produce a liftable block.

Figure 2.16. The excavated soil block awaiting wrapping and lifting. The coin within the arm-rings and the ingot at the bottom centre of the photograph were removed before wrapping.

The two projecting ingots were then removed, as was a projecting coin lying within the arm-rings that could have been crushed by the wrapping (Figure 2.17). The top of the block was then heavily wrapped horizontally in clingfilm kindly fetched by the landowner, and the block carefully lifted. Some of the remaining natural from the underside was quickly removed while two people held the block, and the whole then wrapped again vertically before being placed on a baking tray (Figure 2.18). The block and tray were then wrapped together before being put into the box. A few small holes were made with the point of a trowel in the top of the clingfilm.

The hoard to be taken to the British Museum consisted of: the box, bags containing the two ingots and the coin fragment found outside the trench, bags containing the two ingots removed for wrapping, a bag containing the coin from within the arm-rings, a bag of coins and fragments removed during the definition and cleaning process, and a bag containing the tiny and fragile pieces of dark fibrous material.

Figure 2.17. The coin being removed. The ingot on the left of the block was also removed.

Figure 2.18. The clingfilm-wrapped block being lifted into its temporary container.

Conclusions

While there were of course many questions to be answered by the excavation of the block by the British Museum — not to mention the vast amount of subsequent post-excavation research that has given us so much insight into the hoard and its deposition — I would return to answer the questions asked at the beginning of this section (based on our excavation and not on subsequent work):

- *What is the extent of the deposit?* 40 x 15 x 15cm. The depositor's pit was marginally larger: 50 x 20 x 15cm where the hoard was actually placed, and probably a sub-circle 50–70cm in diameter above.
- *Was it deposited all at once, or over time?* Almost certainly a single deposit.
- *Is it as deposited or has it been disturbed since?* Not disturbed except the top which was mildly disturbed by the plough.
- *If as deposited, was it placed in a container (e.g. box, bag or ceramic vessel)?* Possibly deposited in a leather bag, or wrapped in leather.
- *Is there any structure within the deposit (e.g. several containers, different types of objects in different areas)?* While the coins seem to be throughout the hoard, it may be possible that the arm-rings were in a corner and the ingots on top (though British Museum conservation work did not confirm this: see next section).
- *If disturbed, by what means (e.g. scattered by plough, partially robbed)?* The top has been disturbed by the plough.
- *Was it deliberately deposited or is it a chance collection of objects (e.g. objects settled in a depression in the ground)?* Deliberately deposited in a purposely-dug small pit.
- *Is it a hoard by legal definition?* The excavation showed that the deposit was undoubtedly a hoard, in every sense of the word. Its legal declaration as an item of Treasure, however, could only be made by the local coroner based on the expert evidence provided. This excavation formed a part of that evidence.
- *Is the deposit in an archaeological feature of some kind (e.g. under a floor, in a wall, in a ditch, within a tree's roots, in a pit)?* There was no evidence of other archaeological features. The only feature seen was the depositor's original pit.
- *If not actually within a feature is there such a feature nearby (e.g. placed beside a wall or tree) which might have been intended as a guide for later recovery?* As our trench was only 1.5 x 1.5m in size, we could not be certain that there had not been some feature beyond it. There was nothing on the field's surface to indicate the presence of any structures or other features and the area within *c.* 30m or so was carefully searched for pottery or other indicative finds by James, David and the author and no other finds were recovered. Sub-surface features, e.g. pits, ditches, post-holes for buildings or tree boles, may be present but would only become visible through detailed survey and/or further excavation. The excavation of the Watlington Hoard shows what can be achieved when a responsible metal detectorist, landowner, Finds Liaison Officer and a volunteer archaeologist work together.

2.3 The Table-Top Excavation of the Watlington Hoard Soil Block: observations and inferences

Philippa M Pearce

The excavated soil block arrived at the British Museum on the 16 October 2015. It had been block lifted and wrapped in plastic to keep the soil damp. In this case, the block reached the Museum only a few days after excavation, but our advice in similar cases is usually to keep the block damp and preferably refrigerated until it can be brought to Conservation. Many soils, especially heavy clay, can contract considerably during drying and the friable surface of a find can be flaked off in the process. In the case of corroded coins, this can result in considerable surface loss. Even as received, this hoard was revealing itself as containing coins, jewellery and ingots, with various silver items protruding from one end of the lump of sticky soil. It was obvious to us that this Treasure case was going to be something out of the ordinary so a large number of conservators were included in the work so as to gain experience of the materials and the methods used to dismantle a soil block.

After an initial visual examination, the hoard was X-rayed to see what it contained. Figure 2.19 shows three images with the hoard as received at the top and beneath it the first of two X-rays taken during the project. The first X-ray (in the middle of Figure 2.19) was taken at 225kV 7mA for 15 minutes using a Euroteck® 225kV cabinet and the image captured with Carestream Industrex © HPX-7 software. Ideally, an X-ray can give a route map into a hoard, if it reveals some sort of ordered structure, such as the coin bags in the Beau Street hoard found in Bath (Ghey 2014: 12). The X-rays of the Watlington Hoard showed no remains of pot, box, bag or any other container.

Work began to dismantle the hoard, using wooden tools and soft brushes to reduce the possibility of scratching the silver. The soil was greasy and difficult to clean away, especially from around the thin coins. Our remit for work on coins which have been reported as potential Treasure under the Treasure Act 1996 is legibility, not glamour, so the soil was removed from the detail with water on sable hair brushes and no further cleaning was given to make the silver look more metallic. Likewise, the jewellery and ingots only had soil removal and were left tarnished. A series of photographs taken from above recorded the gradual removal of the soil and the position of the many items in relation to each other. Objects and coin groups had already been assigned numbers from the X-ray and could be logged and labelled as they emerged. The soil was retained so that it could be sieved for small items, notably coin fragments.

The recording of the juxtaposition of the assorted items in the hoard revealed no useful information. Figure 2.20 shows a piece of stone wedged through the bangles and other smaller pieces of stone were removed from in amongst the silver items, showing that the hoard had been considerably disrupted in the soil after burial. Later, fragments of coins were pieced together, the parts coming from different areas of the excavation (Figure 2.21).

Figure 2.19.
Top: the hoard, as received.
Middle: first X-ray.
Bottom: second X-ray.

Figure 2.20. Stones wedged through the arm-rings, plus scattered coins. Coin = 20mm in diameter.

Figure 2.21. Two fragmentary coins, assembled from pieces found in different places in the excavated area. Top: cat. 2.44*; bottom:* cat. 2.31.

► *Figure 2.22. Silver ingot with attached fragment of carbonised wood, as found.*

Especial care was taken to look out for organic remains, anything that might be all that was left of a bag or box. Only some small carbonised fragments of wood were retrieved. Figure 2.22 shows one of the larger pieces, as it was found, stuck to the end of a silver ingot. Two small round section pieces of rod, approximately 2cm in length, aroused some interest as it was thought they might be part of a divination set, but they were neither notched nor lettered and it was considered more likely that they were just pieces of stick. They and other fragments were cleaned and dewatered through increasing concentrations of industrial methylated spirit to maintain their size and structure.

Figure 2.23. Hack-gold fragment (AN2017.24; cat. 1.23*).*

Towards the end of dismantling the hoard, a second X-ray was taken at 225kV 7mA for 9 minutes. This is the lower image in Figure 2.19. The greasy nature of the hoard had made identifying and locating the smaller metal items difficult and it was feared that they may have been obscured by some of the larger finds. A short length of what appeared to be wire was apparent only in the second X-ray, having been eclipsed by the surface ingot. This length of twisted wire was the last find recovered from the soil and proved to be the only gold item in the hoard (Figure 2.23).

All the conservation work at the British Museum was done as part of our contribution to the Treasure process. The soil block was recorded as it was dismantled to preserve as much information as we could with the equipment available and the finds were cleaned for identification and packed in a stable condition for future study.

*Figure 2.24. Silver chloride on surface of coin (WH.21/*cat. 2.76*).*

Acknowledgements

Thanks to colleagues and the student volunteer at the British Museum who worked on X-raying, dismantling and cleaning the hoard: Hayley Bullock, Hazel Gardiner, Saray Naidorf, Fleur Shearman, Kathleen Swales, Maickel van Bellegem (all British Museum) and Amy Walsh (student, University of Melbourne).

2.4 FURTHER CONSERVATION OF THE WATLINGTON HOARD

Alexandra Baldwin

The Watlington Hoard underwent additional conservation treatment at the Ashmolean Museum to help preserve and aid further study of the coins and other objects. The work was carried out over a period of six months in 2017 and was the first time since excavation from the soil block that the coins, divided during cataloguing by the Ashmolean and the British Museum, were examined together in detail.

The coins, silver ingots, arm-rings, and hack-silver arrived at the Ashmolean still covered in soil residues. Further cleaning of the surfaces was required for a number of reasons. Soil left on the surface of the objects can lead to further deterioration of the silver as the soil contains salts and minerals and attracts and holds moisture against the metal promoting detrimental corrosion. The soil was also hiding small details of manufacture and technology that need to be studied.

The condition of the Watlington Hoard on arrival into the conservation labs at the Ashmolean was largely very good. The coins have a high silver content and there was very little corrosion across the surface of the objects obscuring detail; only one coin within the hoard has some surface copper corrosion whilst some of the others had a thin layer of silver chloride (Figure 2.24). The jewellery and ingots likewise had minimal silver chloride and sulphide corrosion across the surface (Figure 2.25 and Figure 2.26).

Figure 2.25. Arm-ring (AN2017.4; cat. 1.18) with silver chloride corrosion across the surface of the object.

Figure 2.26. Ingot with both silver chloride and silver sulphide corrosion (AN2017.12; cat 1.5*).*

Despite the minimal surface corrosion the coins in the Watlington hoard are very brittle and easily damaged. This is caused either by their burial environment (both acidic and alkaline soils may cause the corrosion of impurities such as lead along grain boundaries) or their manufacture (possibly the correct temperature had not been reached during casting causing a granular structure) or more likely a combination of both.

Figure 2.27. Coin (WH.164/cat. 2.21) obverse and reverse before conservation (left) and after cleaning with Industrial Methylated Spirits and deionised water (right).

There were many fragments of coins within the hoard material. Examination of the break edges revealed that this damage occurred post burial. If the coins had been broken prior to, or during burial, corrosion and soil would have covered the break edges, but these edges were clean and without corrosion. Additionally there were many fragments which would not join any others and the majority of these came from the scatter and bottom or edges of the block indicating that these coins most probably broke on initial excavation from the ground and the rest of the coin lost in the ground. The thinness and brittle nature of the coins along with the sticky nature of the clay soil (described previously by Pearce, section 2.3 above) would have made this inevitable in field excavation conditions.

Figure 2.28. Arm-ring fragment (AN2017.23; cat. 1.17) after cleaning to reveal the detail of stamped decoration.

Cleaning the coins and other objects required only very gentle brushing with a small sable haired artist's brush with alcohol and water as solvent to lift the soil from the surface. Any further residues, especially in the details of the decoration, were removed by gently rubbing the surface with tiny buds of cotton wool wrapped around a paired down cocktail stick and dipped in alcohol and water (Figure 2.27).

Cleaning has revealed the fine details of stamped decoration on one arm-ring fragment (Figure 2.28), and notches made by nicking the silver with a knife to test for purity during the Viking period on several other objects (Figures 2.29). Cleaning revealed the crispness of the detail and the lack of wear to the surface of some of the coins exposing marks in the surface of the die and unique die defects (Figure 2.30).

More complex conservation was required to investigate the many pieces of broken coins discovered with the hoard. Many of the tiny fragments were impossible to read or identify so it was important to find joins where possible so that the number of coins and their type could be determined.

Due to the fragility of the coin fragments, and their very small size, it was desirable to keep handling to a minimum to reduce the potential for further breakage or loss to the edges of the fragments. Abrasion of break edges would reduce the likelihood of joins being identified and the successful adhesion of the join. To mitigate the effects of handling it was decided to look for joins virtually. High resolution detailed images of the obverse and reverse of each fragment of coin was enlarged and printed onto paper. These printed images of the coin fragments were cut out and then individually labelled. This enabled joins to be investigated and trialled without touching the real fragments. The joins between the real coin fragments could then be double checked and made. In total 33 coins were either completely or partially reconstructed (Figure 2.31).

Figure 2.29. Ingot (AN2017.8; cat. 1.1) after cleaning. Note the nicks along the edge of the ingot.

*Figure 2.30. obverse and reverse of a coin with little wear to the surface (WH.1/*cat. *2.59).*

*Figure 2.31. Coin (WH.11/*cat. *2.3) left before conservation and right after reconstructing the fragments. Note the bottom fragment of the pre-reconstruction shows the reverse, rather than obverse, of the coin.*

One of the objects identified only after conservation was the hooked tag. It was initially fragmentary and when covered in mud was identified as a possible halfpenny (Williams and Naylor 2016: 9). However, during conservation additional fragments were identified and when cleaned and re-adhered its identity as a coin was called into doubt. The silver of the hooked tag fragment is very thin and in itself unsuitable for a fastening which may indicate that it was a foil applique over a fitting which was made of another metal. Orange/brown corrosion on the underside of the silver indicates that it may have been attached to an iron fitting (Figure 2.32).

The reconstructed coins remain extremely fragile due to the small area of each break edge and a limited application of adhesive. Because of this, and to distinguish these coins from unreconstructed coins within the hoard they were housed in small polyethylene coin capsules to reduce the amount of direct handling that they may be subjected to.

Suggested further reading

For further information on the conservation methods and process, the following publications are recommended: Cronyn and Robinson 1990, Drakon Heritage and Conservation 2018, Hobbs *et al.* 2002, Jones 2008, Rimmer *et al.* 2013 and Watkinson and Neal 1998. All are listed in the bibliography at the back of the volume.

Acknowledgements

Thanks to colleagues in the Conservation Department at the Ashmolean Museum especially Stephanie Ward who carried out much preliminary work for the project, and colleagues in the Ceramics Glass and Metals Section in the Conservation Department at the British Museum especially Philippa Pearce.

Figure 2.32. Hooked-tag (AN2017.25; cat. 1.22) after cleaning and reconstruction. Note the orange/ brown corrosion on the reverse of the fragment.

2.5 PUBLIC-ENGAGEMENT WITH THE WATLINGTON HOARD: NATIONALLY IMPORTANT ARCHAEOLOGY FOR ALL

Eleanor Standley with Helen Ward

The core of this book is about the Watlington Hoard as the subject of academic study — its discovery, excavation, conservation and interpretation — and the contribution it can make to our understanding of the late 9th century. However, the hoard is also part of a broader, modern story concerning the engagement of the general public with their archaeology, history and museums. The hoard was the centrepiece of a series of public-engagement and learning programmes during 2017/18. This chapter reflects on these outreach events and the continuing power of treasure, hoards, Vikings, and King Alfred the Great to ignite people's fascination and imagination. The remarkable number of people who engaged with the hoard through an extensive and varied programme of activities reveals the enduring interest in archaeology and history by non-specialist audiences. The responses from those taking part in the events also provide insight into the sense of pride felt about local finds and heritage that are of national significance.

Public-engagement project

One of the key elements of the acquisition of the hoard and subsequent outreach programme was the collaboration between the Ashmolean Museum of Art and Archaeology, University of Oxford, and the Oxfordshire County Museums Service (OCMS). This partnership was established from the beginning of the project to ensure that the hoard was saved for the nation and remained in the county, and to coordinate related public activities. Carol Anderson, the Museum Services Manager for Oxfordshire County Council, and David Moon, the then curator of archaeology in the OCMS, were instrumental in working with staff from the Ashmolean, county museums, and community partners including the Oxfordshire Play Association and Oxfordshire Libraries whose team also included Rachel Rendall, Sonja Roberts and Sue Wright. Support and advice was also provided by staff in the British Museum, especially at the early stages of the project, including the Treasure Department, Michael Lewis, the Head of the PAS, and Gareth Williams, the Curator of Early Medieval Coins. Within the Ashmolean, the team of specialists were drawn from the Heberden Coin Room, the Department of Antiquities, and the Learning Department. Many other staff-members from across the museum were involved, including Collection Managers, and the Conservation, Registrars, Design and Publication departments. The project provided an excellent opportunity for staff to collaborate, and supported the sharing of knowledge, experience, resources and skills between organisations.

The project began with the joint fundraising effort to secure the acquisition of the hoard. After the declaration of the hoard as Treasure at the Oxfordshire Coroner's inquest in early 2016, the hoard was subsequently valued at £1.35 million by the Treasure Valuation Committee in the summer of the same year. Pivotal grants from the Heritage Lottery

Fund (£1.1 million), The Art Fund (with a contribution from the Wolfson Foundation) (£150,000), and the Ashmolean Friends and Patrons were successfully applied for. These were supplemented by significant donations from many individuals made through the Ashmolean's public fundraising appeal to support the acquisition. This aimed to raise £70,000 in three months — a feat that was successfully achieved with support from the Museum's Development team. During the appeal, the hoard (all the objects and a selection of coins) was formally borrowed from the British Museum (on behalf of the Government's Department for Culture, Media and Sport), where it was being held during the Treasure Process, to support the fundraising. Generous donations were made by 700 named individuals, and by many more visitors who saw the material on display in the 'England 400–1600 gallery' in the Ashmolean Museum and were inspired to support the appeal. A short guidebook was also written and sold in the Ashmolean's shop, *King Alfred's Coins – The Watlington Viking Hoard* (Williams and Naylor 2016), made possible by the generous support of The Carl and Eileen Subak Family Foundation. The book was also sold in the Oxfordshire Museum when the hoard was on display there. The aim of the book was to raise the hoard's profile, promote awareness of the appeal, and to financially support the fundraising; £1 from the sale of every book went to the appeal fund. This successful publication scheme followed that which the British Museum had implemented for the Staffordshire and Frome Hoards (Leahy and Bland 2009; Moorhead *et al.* 2010).

It was in the 'England 400–1600 gallery' where the public could first learn about the hoard's significance and at the same time see pieces of it in person. Its display was purposefully located as close as possible to the Alfred Jewel to make the link with King Alfred explicit. To contextualise the hoard further, it was near the display of objects from the Cuerdale Hoard (other Anglo-Scandinavian and late Saxon finds that the Ashmolean holds; see Graham-Campbell 2011 and Hinton 1974).

The successful public appeal and funding applications led to the acquisition of the Watlington Hoard by the Ashmolean Museum in 2017, where it has been preserved for the people of Oxfordshire and the nation. The grants also supported the hugely successful public-engagement programme. We remain extremely grateful to all for their support.

Having an archaeological acquisition as the focus of such a large-scale, HLF-funded project and engagement programme was a novel enterprise for the Ashmolean Museum at the time. Previous HLF acquisition projects and associated outreach had been focused on paintings in the Museum's Western Art Department, but the activities themselves drew on the Museum's longstanding experience of developing learning programmes for a range of audiences. The Watlington Hoard programme of public-engagement took place during 2017/18, and consisted of seven types of outreach events:

1. three county 'roadshows' at libraries in the region: Bicester, Faringdon and Watlington (Oxfordshire) (Figure 2.33);
2. two Festival of Archaeology 'Big Weekends' in the Ashmolean;

3. learning programmes at Ashmolean: adult, family drop-in event, Primary and Secondary school groups;
4. Watlington Primary School Project: delivered collaboratively by the Ashmolean and County Museum Learning teams and an external community artist;
5. loan of the hoard to The Oxfordshire Museum in Woodstock, to support the opening of their new Anglo-Saxon gallery and related programming for adults, schools and families;
6. display of the hoard in the permanent England 400–1600 gallery in the Ashmolean; and
7. loan of the hoard to two national venues to support themed exhibitions: 'Viking: Rediscover the Legend' at Nottingham Lakeside Arts, University of Nottingham (Nottinghamshire); and the artefact gallery at the JORVIK Viking Centre, York (North Yorkshire).

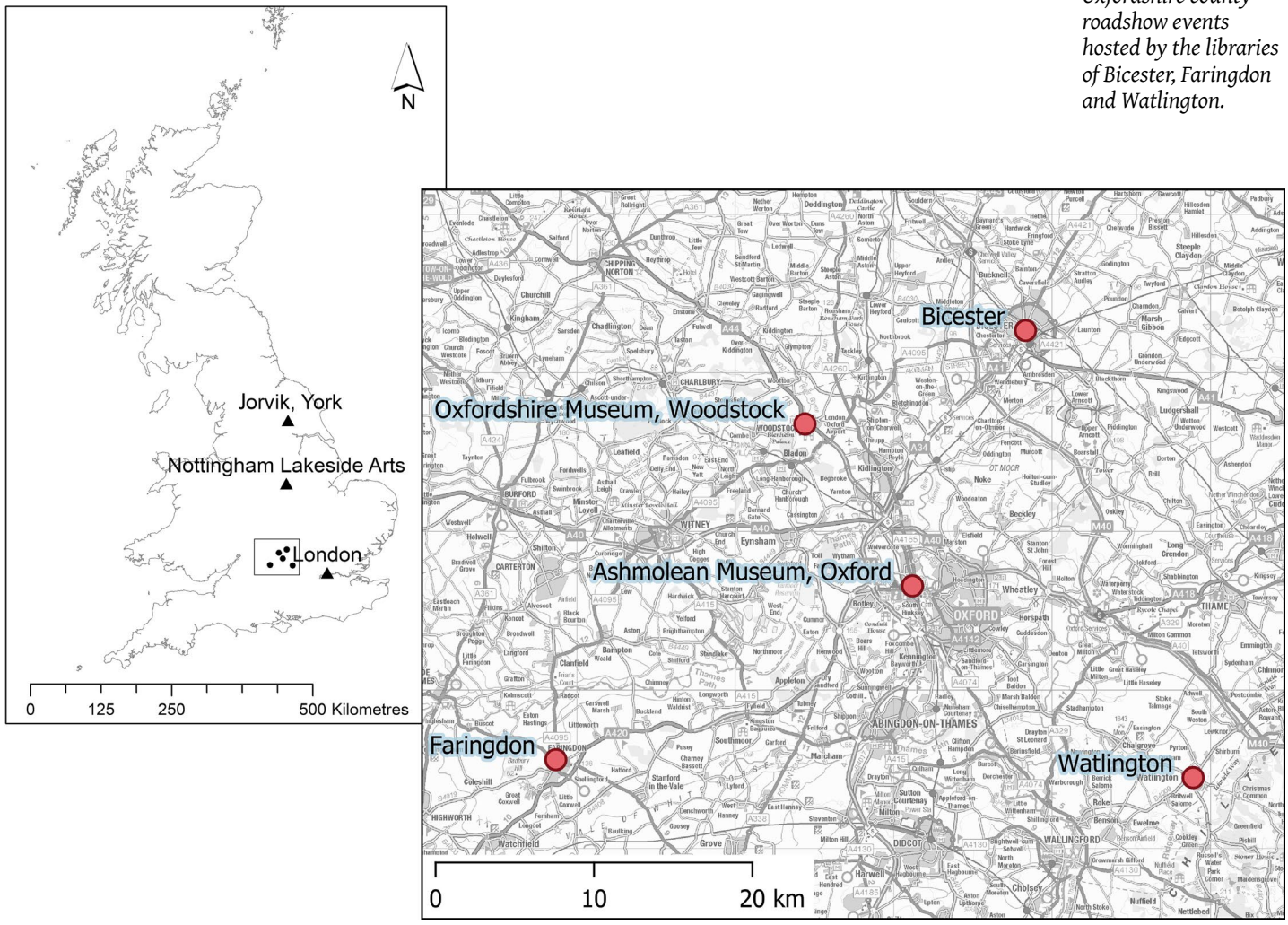


Figure 2.33. Map showing the Ashmolean Museum and The Oxfordshire Museum, and the location of the Oxfordshire county roadshow events hosted by the libraries of Bicester, Faringdon and Watlington.

Table 2.1 Numbers of people who engaged with the hoard either as visitors or as event-participants during the co-ordinated public-engagement programme.

Event (2017/18)	**Number of people**
3 x Roadshows, Oxfordshire	1012
Outreach/ adult education, Oxfordshire	70
Big Weekend, Ashmolean Museum, 2017	6708
Loan to Oxfordshire Museum	9220
KS1 & 2, Ashmolean Museum	180
Secondary/ FE, Ashmolean Museum	135
Watlington Primary School Project	200
Loans to exhibitions at Nottingham Lakeside Arts and YORVIK Viking Centre	133,778
Total	**151,303**

In total, a staggering 151,303 people engaged with the hoard either as visitors to exhibitions or as active event-participants during the programme (Table 2.1; the total number excludes general visitors to the Ashmolean who would have seen the hoard on display and those who attended the celebration event at Watlington library in October 2018).

During the first four of the events listed above (i.e. county-based) a substantial total of 17,525 members of the public engaged with the hoard in some way. It is these events which most clearly show the potential for successful public-engagement programmes that bring together communities with their heritage, archaeology and local museums or cultural venues. At these events staff were able to explain what was in the hoard, its significance and role in a tumultuous period of history, but also to provide a greater awareness of the roles of museums and archaeology. Visitors and participants were also asked for their feedback, and the survey responses in the following text have been drawn from the Learning team's evaluation and case study reports (*Watlington Hoard HLF major acquisition project*, 2017).

By lending part of the hoard to venues in Nottingham and York we were able to reach a wider, national audience. 'Viking: Rediscover the Legend' was a British Museum and York Museum Trust partnership exhibition that travelled to York, Nottingham, Southport (Merseyside) and Norwich (Norfolk) between 2017 and 2019. The Nottingham leg of the exhibition (25 November 2017 – 5 February 2018) provided an excellent opportunity to display material from the Watlington Hoard in what had been part of the Anglo-Saxon Kingdom of Mercia and became one of the five main administrative centres of the Danelaw. In the exhibition the hoard was displayed alongside other nationally important Viking and Anglo-Saxon objects and recent finds, including the Bedale Hoard and the Gilling Sword (both found in North Yorkshire; York Museums Trust YORYM 2014.149 and 1977.51). The Nottingham Lakeside Arts venue hosted the exhibition and collaborated with the AHRC funded project 'Bringing Vikings Back to the East Midlands' led by Judith Jesch to tell the story of Viking life in the East Midlands. The Nottingham Lakeside Arts venue received 22,851 visitors, and at the time, was the second most popular exhibition held at the venue. Similarly, in York, the hoard featured in Europe's largest Viking Festival when it was on temporary display in the artefact gallery of the YORVIK Viking Centre (5 February 2018 – 14 May 2018). During the loan period the Centre was visited

by 110,927 visitors, all of whom had the opportunity to view pieces from the Watlington Hoard and learn about its significance in relation to other material from Viking York.

At the Ashmolean two key, free events took place: Festival of Archaeology's 'Big Weekend' in 2017 and 2018. These were two weekends of public-engagement activities held in the Museum as part of the nationwide Festival of Archaeology in the July of each year. The hoard provided a focus for the Museum lectures, performances, demonstrations, object-handling, storytelling and crafts, which were all related to the Anglo-Saxons and Vikings. With the hoard as centre stage, it became the leading feature in planning for the days, and a specific attraction for visitors. The promotion of the find during the preceding months of the 2017 Big Weekend had set the scene for the larger public event, and in 2018, the event marked the end of the long run of public-engagement events and the return of the hoard to its new home in the permanent gallery in the Ashmolean.

Feedback from visitors attending the 2017 Big Weekend was overwhelmingly positive and highlighted that the immersive activities and specialist talks were a big hit with all ages. Basing the days around the collections, and the newly acquired treasure, gave them a better focus and impact in comparison with celebrating a general archaeological theme or spreading activities more thinly over the two weeks during the national Festival. It was the interaction with specialists that proved most popular with visitors; one adult visitor's feedback was 'I enjoyed holding the objects and listening to the experts explain how they were made. They made history come alive. I would love to come again', and 'talking and listening to experts' was the favourite activity of almost three-quarters of participants surveyed. The accessibility and informative nature of the events was also praised as shown by a parent's feedback comment, 'An excellent range of activities for the children. They enjoyed all of them. Great way of getting them learning'. In 2019, the successful format was followed again when a Festival of Archaeology day on 'Daily life in Ancient Rome' was linked with the 'Last Supper in Pompeii' temporary exhibition that opened two weeks later.

Schools were a key target audience for programming. Both the Ashmolean and Oxfordshire County Museums Learning teams developed free workshops that were targeted at local Primary and Secondary schools. These interactive sessions provided students with the opportunities to learn about the hoard, treasure, and the role of museums. A secondary school pupil's feedback succinctly revealed the recognised importance of museums and collecting of archaeological finds: 'I think it is important because we wouldn't be able to learn about them [objects] without them [museums]'. Activities included gallery-based tasks, group discussions, viewing the hoard and other Anglo-Saxon objects and coins, and handling replicas of objects from the hoard which had a particular impact as seen in the feedback from a Year 8 pupil, 'I enjoyed being able to feel replicas of the items. It was also very interesting because Watlington is nearby'.

Notably the programmes were seen as positive life experiences for the children and offered material-based history-learning that is not in the core curriculum. Responses from one of the observed primary school sessions revealed that students' learning and engagement was most positive when viewing objects from the hoard and other artefacts that set the hoard in context. More than half of the group chose the Alfred Jewel as the most interesting thing about their

session, and others appreciated viewing the coins. The material objects, including replicas, were also a key feature praised in the secondary school groups. The use of real things over digital content or activities was evident in the fact that almost a quarter of students identified their favourite activity as handling replicas of the hoard's contents and seeing the hoard on display, rather than using iPads during the session (Figure 2.34). One of the teachers also extolled the virtues of using artefacts and replicas by Learning staff to allow the past to be brought to life, and 'The children have learnt to really appreciate artefacts in museums and the value they hold historically'.

Similarly, it was the contents of the hoard — the things — that were centre stage at the free 'roadshow' events. These consisted of three, single day-events that took place in May, June and September 2017 in local libraries at Bicester, Farringdon and Watlington, respectively (Figure 2.33; Table 2.2); the last of which was pitched as the hoard returning 'home'. Representative

Table 2.2 Number of attendees at the three county roadshow events.

Roadshow event	Number of attendees
Bicester	285
Faringdon	168
Watlington	559
Total	**1012**

Figure 2.34. A school group taking part in replica object-handling in the Ashmolean Museum.

parts of the hoard that were stable enough to travel (six of the objects and 12 coins) were lent and put on display in the libraries, with curators present to discuss the hoard with visitors and to answer questions (Figure 2.35). In addition, there were associated lectures by specialists and the finder James Mather, replica object-handling, and craft activities designed for families led by Learning staff. It was apparent from the numbers of visitors and survey responses at the roadshows that taking the objects to key areas in the county allowed a greater, more personal engagement with the hoard than might have been experienced by a visitor on a general trip to the Ashmolean. Indeed, most significantly these events attracted new audiences; of 57 attendees surveyed at the roadshow events, 20% had never visited the Ashmolean Museum, 73% had never visited The Oxfordshire Museum, and 17% had never visited either museum. Following attendance at the roadshow events visitors became motivated to become first-time visitors to the museums, or to revisit them. Similarly the short-term loan of the hoard (five weeks) to The Oxfordshire Museum, Woodstock, to support the opening of their new Anglo-Saxon gallery, 'The Anglo-Saxons in Oxfordshire: *Gewisse* to Alfred and Beyond', created a greater sense of excitement and became an extra attraction for visitors in their discovery of Oxfordshire's history.

Figure 2.35. Dr Julian Baker of the Ashmolean Museum (right), discussing the hoard with visitors at the Bicester Library roadshow.

The roadshow events were advertised at schools, local history groups, and on social media, but is was also through word-of-mouth that many attendees heard about the events. Visitors were attracted to them because they were local and well-focused events. It was clear that an opportunity to take part in a 'special' one-off, day-event created intrigue and generated attention. During the events there were atmospheres of excitement and enjoyment with people of all ages and levels of knowledge taking part. The visitors also had the opportunity to learn about the hoard, the period and historic context in which it was buried, and to discover more about local archaeology and museums. Seventy-seven per cent of the surveyed attendees suggested that the event had given them a better understanding of the archaeology and the work of museums, and 86% agreed that the event had helped them to understand why the hoard was an important find.

The success of these roadshow events was in a large part down to physically taking the hoard out to venues in the county: in effect bringing it to members of the public, rather than waiting for, and expecting people, to make a trip to the

city of Oxford to visit the Ashmolean. Attendees appreciated the chance to see the hoard in their local area, and especially valued the opportunity to put their questions to and engage in discussion with curators and museum staff. One visitor stated, 'Wonderful to see the coins on display, what a great use of the local library'; this feedback and success of the events highlights the potential of using local libraries for cultural, collaborative events.

The Watlington roadshow, which had the greatest number of attendees (Table 2.2), was tied into the Watlington Primary School Project. This was a pivotal collaboration between the Ashmolean Learning and OCMS staff, and Watlington Primary School. A series of intensive activities were created to engage the children with the nationally important archaeological find that had been discovered in the vicinity of their own town. The Project dealt with the hoard and its historical context and engaged all year groups from Reception to Year Six. One of the key aims was to give the children 'a sense of pride, ownership and understanding of the Watlington Hoard' as it is part of their local heritage (Sue Wright, Project co-ordinator and Collections Project Officer at OCMS, pers. comm.). Importantly, the events provided were at no cost to the School — all were funded via the HLF grant — and the funding enabled a community artist to be involved in the project.

The Project took place over five weeks in Autumn of 2017 and after curriculum teaching on the Anglo-Saxon and Viking periods. The programme was an intensive week of events and related tuition to introduce aspects of the hoard to the 200 children involved (see Watlington Primary School blog 2017a). This was followed by a month of immersive art classes led by volunteers under the direction of the artist Francesca Shakespeare, to create two installation pieces that were to be displayed at the school (Figure 2.36) (see Watlington Primary School blog 2017b). During the tuition-week drama sessions, activity packs, replica-object handling, and sessions that introduced methods of archaeological investigation, finds-processing and metal-detecting took place. An additional session on Anglo-Saxon burial was also carried out, and a story session invoking aspects of Viking sagas. The Year Six class group who took part in the Project completed evaluation surveys, and at the end of the first week they reported a greater understanding of Vikings, Anglo-Saxons and the Watlington Hoard. Just over three-quarters of the year group also agreed that the project had made them feel more connected to their local history, 'it is amazing to know that there was a hoard buried really close to us' (Year 6 pupil, Watlington Primary).

Legacy

From the hoard's discovery, to its fundraising, to its role in a nationwide programme of public-engagement events, it is this connection with local history that is the enduring feature which has captured people's imagination. Being able to link a local find to such a nationally important narrative can be a significant hook that draws people into the excitement and encourages them to discover more. The idea of finding 'buried treasure' is an attractive and understandable idea to many, but we need to actively engage non-specialists with the deeper meaning and role of archaeological objects (and museums) so that all can better understand why these 'things' are important to our understanding of the past and our shared heritage.

Figure 2.36. One of the art installations created during the Watlington Primary School Project.

The popular county-roadshows can inform future ways in which we present objects to the public and how we utilise archaeology collections for public events and improve accessibility for all our audiences. Moving forward lessons can be learned about the power of objects and the need for specialists to engage directly with audiences within institutions, but also outside of the sometimes-staid museum environments. Such events benefit our audiences, but also curators who have an opportunity to engage with the public in a relaxed and conversational style whilst delivering key information. Themed Festivals of Archaeology 'Big Weekends' can also be successfully planned to work with concurrent temporary exhibitions or major acquisitions. Although the Ashmolean has many existing links to international, national and regional museums and galleries, new connections can be created through programmes such as the Watlington Hoard project.

It is not only a new permanent display of the hoard in the Ashmolean that has been created for visitors, but also a permanent display of replicas at Watlington Library, and training which supported library volunteers. Other intangible legacies, include knowledge-exchange and collaboration which benefited a far-reaching range of staff and volunteers in the heritage and school sectors in Oxfordshire, and the enhanced understanding of school groups and visitors at the events.

However, it should go without saying that it takes a large number of people and a great deal of work in the preparation and running of these types of events to ensure they are managed and accomplished successfully and securely. Another important consideration for future projects such as the Watlington Hoard project is the relative short notice of Treasure finds and the process of acquisition which makes it challenging for institutions to respond quickly in order to fundraise and to plan for large-scale programmes and outputs. The short- and long-term work generated, and tight timescales have knock-on effects on day-to-day work, and other ongoing projects.

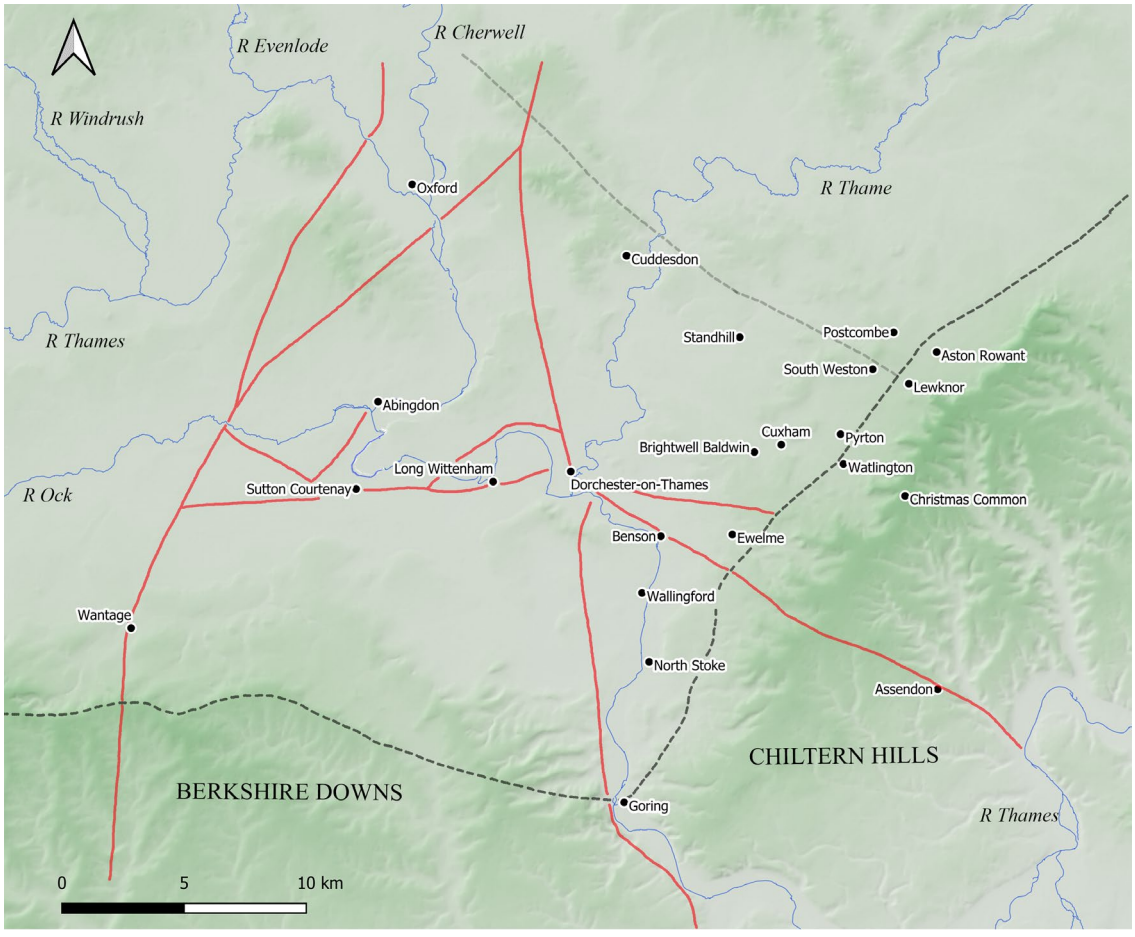
Further research and dissemination will continue to expand our understanding of the Watlington Hoard and Oxfordshire's role in the later 9th century, but it is hoped that more collaborative events such as those discussed above can take place to promote not only new archaeological finds and treasure, but other important archaeology already held in our museum collections.

Chapter 3

The archaeology and landscape of the Upper Thames Valley in the 9th century

John Naylor

The hoard that forms the focus of this book was discovered on land in the Watlington area of southern Oxfordshire (see Chapter 2 above for discussion relating to its findspot and discovery). The Upper Thames Valley (Figure 3.1) of the late 9th century — the time that the Watlington Hoard was buried — was a product of change and development that had started in the 7th and 8th centuries. Alfred the Great (871–99) was born in the south of the region at the royal estate of Wantage in 849, then a part of the larger district of Berkshire which included lands all the way to the River Thames. Oxfordshire at this point in time did not exist, the first reference to it appears in texts dating 1010–11 (Blair 1994: 102; see Lavelle, Chapter 4). The Upper Thames



Red lines: routes of Roman roads; black lines: route (approx.) of Icknield Way and Ridgeway; light grey: route (approx.) of saltway from Droitwich (Worcestershire).

Figure 3.1. Map of the Upper Thames Valley and surrounding area showing locations and features discussed in the text.

region also contained no settlement which could be considered urban. The system of fortified *burhs* in Wessex, many of which developed into towns in the 10th century, probably began to be installed outside the core of the kingdom only in the 880s (Christie and Creighton 2013: 114; Yorke 2013: 91, 104). The nature of occupation at these places in the Watlington area, notably at Oxford and Wallingford, was small-scale and the settlements themselves were unfortified until then. However, it was also a busy, well-connected and historically important area in the 9th century. This chapter introduces the relevant archaeological and historical evidence to provide an outline of landscape and settlement in the area around the time of the hoard's deposition, and context for the discussions which take place in the later chapters in this book.

Mercia and Wessex: a frontier zone

The Upper Thames Valley can be considered a broad frontier zone between the kingdoms of Mercia and Wessex from the 6th–9th centuries. The precursors of the West Saxons, the *Gewisse*, coalesced in the region during the 6th and 7th centuries, probably around the area encompassing Abingdon and Dorchester-on-Thames which includes likely high status settlements at Drayton/Sutton Courtenay and Long Wittenham (Hamerow *et al.* 2013: 49–50, 59–64). The Mercian conquests of the mid-7th century pushed this *Gewissan* centre of power southwards towards what became the Wessex heartlands around Winchester, after which there appears to have been both intermittent warfare between the two and occasional alliances, such as a joint venture against the Britons in 743 (Blair 1994: 42–45; Higham and Ryan 2013: 185). Wessex appears to have controlled the area from the mid-8th century until 779 at which point Offa of Mercia (757–96) defeated Cynewulf of Wessex (757–86) at the royal estate of Benson and the Upper Thames returned to Mercian rule. This emphasises the importance of the area to the Mercian kingdom providing the easiest routes to the port at London and its lands in the south-east.

In 825, however, Ecgberht of Wessex (802–39) defeated the Mercian king Beornwulf (823–25) at Wroughton (Wiltshire), bringing the south-east of England and the Upper Thames into the orbit of Wessex and a change in fortunes for the two kingdoms (Blair 1994: 56). Within the Upper Thames region, Blair (1994: 56) has argued that it was probably the higher land around the valley, especially the Berkshire Downs, which formed the natural barrier between the two kingdoms but over time, and probably through negotiation, the River Thames itself became a permanent boundary.

The inherent strength of 9th-century Wessex may well have lain in its firm hierarchical structure with power in the hands of the king alone, his ealdormen appointed directly by him to exercise his power, and even those of lower rank, the king's thegn (*ministri*), closely aligned to the king (Higham and Ryan 2013: 243–44). In contrast, the situation in Mercia might be seen as looser, more a confederation of peoples who recognised and supported one man as king than a defined kingdom (Keynes 2001: 325–26). By the 860s, however, we know that they had formed broad alliances through inter-marriage and military co-operation. The Mercian king Burgred (852–74) married Æthelwulf of Wessex's (839–58) daughter Æthelswith further consolidating West Saxon control over the area, which can also be seen in land grants made by Æthelwulf and the birth of Alfred at Wantage in 849 (Blair 1994: 93). Economically, too, the kingdoms worked

together in this period, most visibly through coinage, with Burgred's standard Mercian design also used by both Æthelred I (865–71) and Alfred until at least Burgred's abdication in 874 (Naismith 2017: 159–63; Figure 3.2). The further monetary co-operation seen between Alfred and Burgred's successor Ceolwulf II (874–*c.* 879) forms the core element of the coinage found in the Watlington Hoard (see below, Naylor, Chapter 6).

Inevitably the relationship between the two kingdoms, and the successes of Wessex in comparison to the decline of Mercia, must be framed by the effect of the Viking attacks of the 860s–870s and this is important to briefly outline (Figure 3.3). Following their conquests of the kingdoms of Northumbria (866) and East Anglia (869), the so-called Viking Great Army attacked both Wessex and Mercia, over-wintering in various locations in both kingdoms and their broader territories. Some of these have been archaeologically investigated including Repton (Derbyshire) and Torksey (Lincolnshire) thus providing a broad signature for the archaeological footprint of a Viking camp (Biddle and Kjølbye-Biddle 2001; Hadley and Richards 2016, 2018). Burgred was forced to abdicate and was exiled in 874 while the Vikings were based at Repton, and in 877 the kingdom was divided between Ceolwulf II and the Vikings, forming western and eastern regions. Wessex itself had been ravaged throughout the 870s, including defeats at Reading (Berkshire; 871) and a truce made at Wareham (Dorset; 875). Having retreated to Mercia and over-wintered at Gloucester in 877/78, the Vikings then attacked Alfred's forces at Chippenham (Wiltshire) forcing him into the Somerset Levels at Athelney. It was only at the subsequent battle of Edington (Wiltshire; 878) that Alfred defeated the Viking army under Guthrum. A treaty between the two in 879/80 gave Guthrum East Anglia, and a boundary was established between the two regions comprising Wessex with the remaining areas of Mercia on one side, and the 'Danelaw' of the Vikings on the other (Keynes 1997: 52–57; Williams and Naylor 2016: 19–20). The Vikings over-wintered at Cirencester (Gloucestershire) in 879/80 before moving on to East Anglia, although no traces of the occupation have been identified archaeologically. Ceolwulf II was the last king of

Figure 3.2. Shared coin designs between Mercia and Wessex: the Lunettes type silver pennies. Top: Burgred of Mercia (PAS KENT-4FC763); middle: Æthelred I of Wessex (PAS CAM-D6710C); bottom: Alfred the Great of Wessex (PAS PUBLIC-A00281). Scale 2:1.

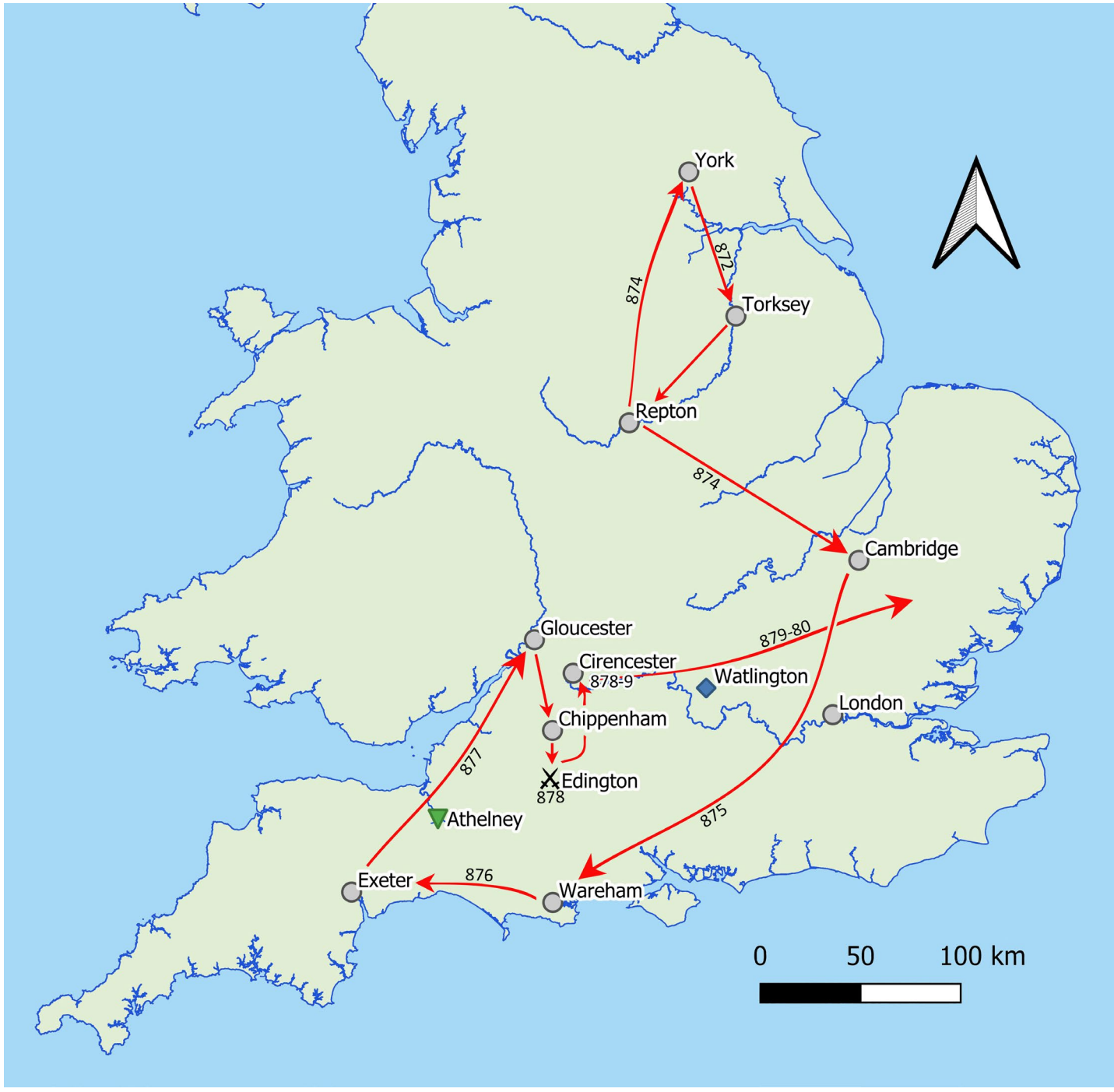


Figure 3.3. Map showing the known movements, raids and winter camps of the Viking Great Army from 872–79/80.

Mercia, replaced by Æthelred, who was listed as an ealdorman rather than king. He accepted Alfred as his overlord and married Alfred's daughter Æthelflæd, the 'Lady of the Mercians', famous for her re-foundation of many Midlands towns and conquest of much of Viking-held southern England with her brother Edward the Elder (899–924) (Blair 1994: 96–97; Higham and Ryan 2013: 298–301).

THE 8TH–9TH CENTURY IN THE WATLINGTON AREA

While the Upper Thames Valley formed an important political boundary between southern England's two most powerful kingdoms throughout the 8th and 9th centuries, the archaeological evidence highlights underlying similarity too in the region. Archaeological excavations and stray finds suggest that it was an active zone of communication and interaction with little difference visible in settlement form or the types of objects found across the area; this reflects broader patterns seen across much of the south and east of the country at this time. In order to understand this broad archaeological landscape context it is useful to consider the Watlington area in a little more detail, exploring routeways, settlement and material culture in the 8th and 9th centuries. This may hold clues as to why the hoard was buried in this area as well as being useful comparative to the material in the Watlington Hoard (see Naylor, Chapter 9).

Routeways

The small town of Watlington lies at the foot of the south-western end of the Chiltern Hills at the edge of the Vale of Aylesbury with the River Thame to the north; to its west lies the River Thames and the Upper Thames Valley bounded by the Berkshire Downs and Cotswolds hills (Figure 3.1). The area formed an important crossroads of north-south/east-west communication routes. These include rivers, especially the Thames and the Thame, and the Roman road network which remained relevant in the early medieval period as evidenced through the analysis of stray finds; several crossing points of the Thames are known from Wallingford to Goring (Naylor 2013: 53, figures 5–6). This network skirted north and south of the River Thames, one branch running close to Watlington on the route from Dorchester-on-Thames into the Middle Thames across the Chiltern Hills (Hamerow *et al.* 2013: figure 1). Another important land route is the Icknield Way — also often referred to as the Ridgeway, e.g. across the Berkshire Downs — running from the Wash in Norfolk south-west across the country into Buckinghamshire and Oxfordshire along the line of the Chilterns. It then continues across the Thames and along the Berkshire Downs into Wiltshire, a total length of over 200km (Reynolds and Langland 2011: 416–17). There was no single track, however, rather a 'broad zone of communication' comprising parallel, probably multiple tracks (Harrison 2003: 1). East of the River Thames along the Chiltern Hills are two important land routes, the Upper and Lower Icknield Ways, generally running around 2km apart. The Upper Icknield Way runs above the spring levels on the higher ground of the Chilterns while the Lower Icknield Way runs to its north on lower ground (Head 1955: 19). The age of these routes is disputed but both were certainly significant by the early-medieval period and there is strong evidence that the Lower Icknield Way in South Oxfordshire and southern Buckinghamshire was, in part at least, a Roman road (Reynolds and Langland 2011: 416; Morris *et al.* 1968: 14; figure 4). Watlington is located between the two routes, with the Upper Icknield Way above it on the hills and the Lower Icknield Way running through Pyrton, Cuxham and Brightwell Baldwin (Morris *et al.* 1968: 14).

Another set of routes — saltways — are more ephemeral and often traced only through later evidence. These begin from the important brine springs at Droitwich (Worcestershire) which then fan out across the region. Blair's (1994: 84–86, figure 54) reconstruction of these argued that a number of routes were in use, one of which ran to the north of Oxford, passing Great

Rollright and turning south towards the Icknield Way which it met around South Weston, a few kilometres north-east of Watlington. The potential importance of this junction in the 8th–9th centuries will be discussed further below.

Settlement and archaeology

The Watlington area in the 8th and 9th centuries was most likely dominated by the royal estate at Benson, although we know little of its nature in this period. As we saw above, Offa defeated the Wessex king Cynewulf there in 779 regaining the territory for Mercia but little else is known, although by Domesday it was the richest manor in Oxfordshire (Mileson and Brookes 2014: 4). Excavations uncovered occupation stretching back to the Neolithic including some early-medieval evidence consisting of three mid-6th–7th-century sunken-featured buildings and enclosure ditches (Pine and Ford 2003: 141–44). One of these enclosures has since been re-interpreted as a potential 7th-century 'great hall' equivalent to those found at Sutton Courtenay and at Long Wittenham, the former also the centre of a royal estate (McBride 2016; Brennan and Hamerow 2015; Hamerow and McBride 2018). Hammond (1998: 23–27; figure 2) has argued that Benson was of primary importance in the 8th–9th centuries with lands under the estate's control stretching as far as Henley-on-Thames. Part of this area has been reconstructed as the estate of *Readonora*, a large strip of land incorporating Standhill, Watlington and Assendon, and encompassing lands from the Thame valley floor to the Chilterns to provide a wide set of mixed resources including pasture, arable and meadow lands (Hammond 1998: 23–27). It is possible that this and the wider area, including around Watlington, was under the administration of an important royal centre at Benson, and the landscape here was divided into a relatively small number of linked estates.

Further than this, any reconstruction of settlement in the area depends on archaeological evidence and finds. There have been no large-scale excavations of early medieval settlements in the area, and those beyond Benson relate mostly to burials, although field-walking and small-scale excavations in North Stoke uncovered likely 6th–7th-century settlement features (Ford and Hazel 1990). At Ewelme, near Benson, 5th–7th-century burials have been found in several locations, perhaps attesting to a larger cemetery there, with more in the Lewknor area known from Postcombe (Mileson and Brookes 2014: 6–8; Hinton 1973). Another cemetery at Beacon Hill, Lewknor was radiocarbon-dated to the 9th century (Chambers 1976: 84). These relatively meagre findings have now been greatly enhanced through the recording of finds made by metal-detectorists which add a rich new source of information regarding the nature and distribution of settlement in the 8th and 9th century in the Watlington area. The finds are mostly recorded by the PAS with some coins also recorded by the EMC.

One such group of metal-detected finds from Ewelme has been highlighted by Mileson and Brookes (2014) where 42 early-medieval objects have been found, the core group belonging to the 8th and 9th centuries. These include 12 8th-century coins plus objects dated more broadly such copper-alloy pins, strap-ends and tweezers which potentially reflect activity stretching into the later 9th century (Figure 3.4a–d). The combination of object types and the presence of coinage was interpreted to suggest that the site was likely a periodic fair or market which was sited at a known meeting place located on a branch of the Lower Icknield Way which runs close

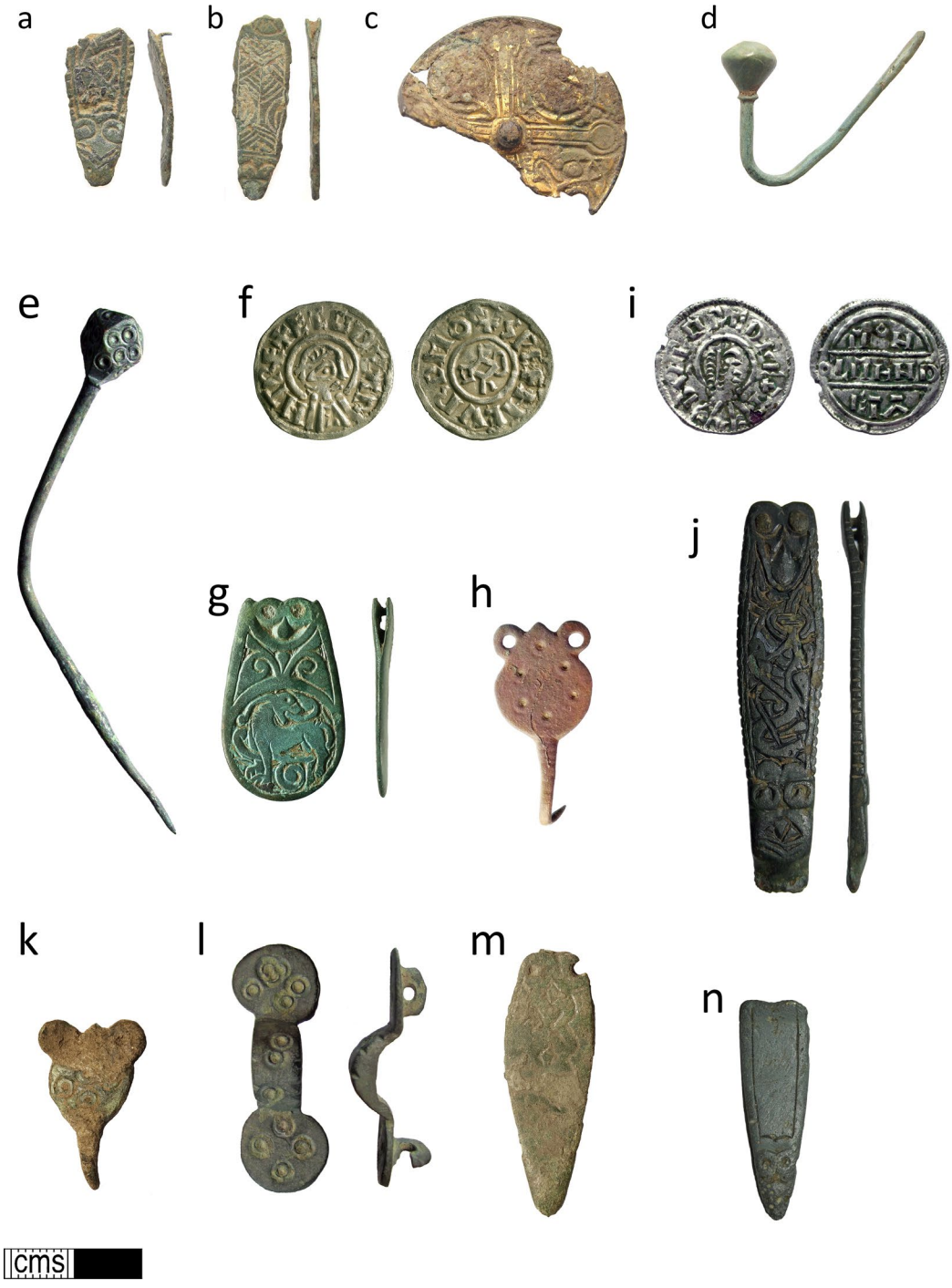


Figure 3.4. A selection of 9th-century objects from South Oxfordshire reported to the PAS. Scale 1:1.

Ewelme: a) strap-end (BERK-01CBC7), b) strap-end (BERK-01C044), c) mount or pin head (BERK-018A38), d) pin (BERK-01D3A6).
Watlington: e) pin (BUC-DADAE8), f) penny of Ecgberht of Wessex (BH-3E6308), g) strap-end (BH-EB9324), h) hooked tag (SUR-843B4A).
Pyrton: i) penny of Burgred of Mercia (SUR-453548), j) strap-end (BERK-04A9D4).
Lewknor: k) hooked tag (FAJN-652EA4), l) ansate brooch (OXON-6B8D7D), m) strap-end (FAJN-6523E2), n) strap-end (BH-9A5A2A).

by. It was thought to be an important node in the overland routes running east-west (Mileson and Brookes 2014: 22–27). This interpretation of the site fits in well with current models where rural trade was articulated at junctions in communication routes, often at meeting places or estate centres (e.g. Pestell 2011). The assemblage discovered at Ewelme — coins (including the standard pattern of more silver early pennies of the late 7th–mid-8th century, often called *sceattas*, than later coins), and copper-alloy artefacts within a date range of the 7th–9th centuries — is quite typical of such sites. Similar evidence is seen at several other locations in the area, although it should be stressed that the numbers of coins from Ewelme is above average for the Upper Thames Valley (Naylor 2013: figure 5). Ewelme is not unique, however, and the description of the area encompassing the Icknield Way east of the Thames as an early-medieval 'hot spot' of activity has been made previously (Hamerow *et al.* 2013: 51, figure 1).

One of these 'hot spots' is in the parish of Watlington. Thirty-six early-medieval objects have been recorded by the PAS and EMC including seven late 7th–mid-8th century early pennies and a silver penny of Ecgberht of Wessex dating 828–39 as well as copper-alloy pins, hooked tags and strap-ends (Figure 3.4e–h). Located between the Lower and Upper Icknield Ways, and near cross-Chilterns routes, it is likely that it would have been a prime location for settlement and trade. One of these cross-Chilterns routes has been traced by Hammond (1998: figure 2), running north of Watlington from Christmas Common to Pyrton where it meets the Lower Icknield Way. A minster church was located at Pyrton, documented in a charter of 887 and was well established by this date (*ibid.*: 27). Few finds have been recorded by the PAS from the parish but early-medieval objects (Figure 3.4i–j) include a rare stray find of a penny of Burgred of Mercia (852–74) and a 9th-century strap-end with zoomorphic Trewhiddle-style decoration.

Another 'hot spot' lies around 5km north-east of Watlington around Lewknor. One of the saltways postulated by Blair (1994: 84–86; see above) meets the Lower Icknield Way at South Weston, *c.* 1.5km north-west of Lewknor village. Metal-detecting in the parish has uncovered several silver *sceattas* (recorded by the EMC). Excavations during construction of the M40 motorway uncovered burials nearby at Postcombe and Beacon Hill (see above), and a large hoard of silver *sceattas* was deposited in the early 8th century nearby at Aston Rowant (Kent 1972). The importance of this saltway route is also emphasised by the presence of a high-status barrow burial of 7th-century date at Cuddesdon, close to where the saltway crosses the River Thame, and itself on the site of the later palace of the Bishop of Oxford (Booth *et al.* 2007: 384–85).

Alongside the discoveries at South Weston, finds are known from elsewhere around Lewknor with an overall early-medieval assemblage highly comparable to Watlington and Ewelme. Twenty-five 7th–9th century objects (plus a few earlier and later pieces) have been recorded by the PAS including 17 coins, and 16 copper-alloy objects consisting of seven strap-ends, four pins, four hooked tags and an ansate brooch (Figure 3.4k–n). The general location of these finds in a landscape of busy communication routes again suggests a settlement well-attuned to traders and travellers crossing the region.

Conclusion

Archaeological evidence from the Watlington area — here taken to roughly encompass the area from the River Thames along the Chiltern edge towards Buckinghamshire — illustrates how this was an important region alongside other well-known 'hot spots' in the Upper Thames Valley, e.g. around Abingdon to Dorchester-on-Thames. Various documentary references illustrate the central role of the estate at Benson in local administration having oversight across a wide area, one much larger than the current parish. At a number of sites relatively large numbers of coins have been discovered, mostly through metal-detecting, their chronology showing many of these to be later 7th–mid-8th-century issues with fewer later coins; other objects illustrate the importance of these sites stretching well into the 9th century and later. This is a typical pattern seen across southern England representing the numbers of coins circulating rather than particular intensity of activity; the numbers of other metal objects show that this area of the south-western Chilterns was quite intensively occupied, integrated into broader networks of communication and trade. The importance of the east-west Icknield Way is well-known but the evidence produced through the recording of stray finds by the PAS also shows that it is the areas around junctions between routes which formed the focus for these material culture-rich settlements, along and around the Icknield Way and the saltways coming south from the Midlands for example. It is through this landscape and along these routes that the Viking Great Army likely travelled as they left Wessex for East Anglia after Edington and their over-wintering at Cirencester. The discovery of the Watlington Hoard in such a location, although unexpected, should not be treated as a huge surprise either with cross-region traffic limited to relatively few routes. The movements of the Viking Great Army here and the burial of the hoard in the Watlington area form part of the broader story of the 860s and 870s, and these themes will be explored after further discussions of the historic landscape (Lavelle, Chapter 4) and the contents of the hoard (Naylor, Chapters 5–6; Kershaw, Chapter 7; Baker, Chapter 8) to investigate the Viking impact on the region (Naylor, Chapter 9).

Chapter 4

Oxfordshire, Wessex, and Mercia in the Age of Alfred the Great

Ryan Lavelle

Introduction

There was a sea-change in the nature of the Thames Valley and the definition of the Wessex-Mercian frontier after 878, and it is important to consider the Watlington Hoard and its findspot within the context of the events of this decade preceding its deposition, and the control of territory of the region in the 880s and 890s. The sense of a historical frontier landscape defined by historical memory is an important issue to consider and one which the Watlington Hoard can steer us to.

This chapter discusses the connection between the landscape and contemporaneous texts, which shed light on the significance of Watlington and relations between the West Saxon and Mercian kingdoms in the 9th century. I first present the connections of King Alfred with the Anglo-Saxon shires of Berkshire and Oxfordshire; the next section explores the sense of meaning of the Thames Valley in the 9th century, and it leads on to a consideration of the Wallingford and Watlington area within that region. The perceptions of Alfred, Ceolwulf II and political events, and how these may be echoed and memorialised in the Anglo-Saxon landscape are also reflected upon. Finally, the chapter finishes with the implications of the regional dimension for the Alfredian 'Kingdom of the Anglo-Saxons' which was emerging in the 880s.

Oxfordshire, Berkshire and Alfred

The findspot of the Watlington Hoard, at the intersection of the two Anglo-Saxon shires of Berkshire and Oxfordshire, may tell us something about the relations between the West Saxon and Mercian kingdoms at the end of the 9th century. It is likely that neither of these shires existed in anything resembling even their pre-1974 forms (let alone their current forms) when the Watlington Hoard was deposited. There are no topographical boundaries to 'Oxfordshire' when it first appears in the written record in the 11th century (Blair 1994: 1), and its geographical artificiality may suggest that it was organised as a shire comparatively late in the Anglo-Saxon period. Berkshire may also have been subject to reorganisation at the time but was somewhat more senior. There is an added complication in the layer of artificiality provided by the 1974 reorganisation of counties. As an example, the important places of Wantage and Wallingford (discussed below) were in the Anglo-Saxon shire of Berkshire, but now fall within Oxfordshire's boundaries, in an area which some locals refer to as 'Occupied North Berkshire'. In some ways the 1974 reorganisation has made the archaeology of the region a little simpler because it gave formal designation to an area of great archaeological importance in a cultural zone of high archaeological activity. Although this chapter follows current archaeological convention

in terms of referring to 'Oxfordshire' in terms of post-1974 county administration, it is worth stressing here the liminality of the Thames frontier for the West Saxon kingdom (Baker and Brookes 2011; 2013: 269–333).

There is some irony in considering Oxfordshire at the time of King Alfred as, despite distinctly dubious late medieval traditions of Alfred's University of Oxford connections (Keynes 1999), the earliest reference to the shire is in the *Anglo-Saxon Chronicle*'s CDE versions, from over a century after the king's death. It records a Viking force rampaging through the then-unified English kingdom of Alfred's great-great-grandson, Æthelred II 'the Unready', in 1010:

> and [they] burnt throughout the fens and they burnt Thetford [Norfolk] and Cambridge [Cambridgeshire] and afterwards they turned **southwards into the Thames** [valley] and the mounted men rode toward the ships. And afterwards they **quickly then turned west into Oxfordshire**, and from there into Buckinghamshire, and so along the Ouse until they reached Bedford, and so forth to Tempsford [Bedfordshire].
>
> *7 bærndon geond þa fennas, 7 Þeodford hi forbærndon 7 Grantabricge, 7 syððan wendon eft **suðwerd into Temese**, 7 ridan þa gehorsedan men ongean þa scipo. 7 siððan eft **hrædlice wendon westweard on Oxenafordscire**, 7 þanon on Buccingahamscire, 7 swa andlang Usan oð hi comon to Bedeforda, 7 swa forð oþ Temesan ford [...]* (*ASC* CDE 1010; Plummer 1892–99: 1:140; trans. adapted from Whitelock *et al.* 1965: 90).

As Scott Thompson Smith noted (Smith 2010), the *Chronicle* uses verbal formulae which are remarkably similar to charter bounds: their textual placement here suggests that notions of geography were embedded in the landscape and could be drawn upon. The movement of the Viking army is presented as rapid and confused, suggesting different elements of an army, but the text presents a strong geographical sense of place. The entry is significant here not only because it evokes the movement of hostile armies, members of which presumably deposited hoards of precious metal in the landscape (see Naylor, Chapter 9, below), but because the Chronicler of Æthelred's reign drew on Alfred's reign to construct his narrative. These deliberate textual echoes show that the points in the landscape continued to mean something to the contemporary audience (Lavelle 2010a; Konshuh 2014: 183). We might at least note that for our purposes the Chronicler drew on places in the landscape which would be familiar to his audience. Even if this is not *prima faciae* evidence of Oxfordshire's existence, let alone importance a hundred years before the 1010 entry in the *Chronicle*, it does at least show that the Thames valley and Oxfordshire were established and recognised areas in the landscape.

The area of Berkshire, now within the south-western corner of Oxfordshire, was a significant place for King Alfred, being the recorded location of his birth and where he was later depicted as displaying idealised, royal virtues during battle with the Vikings. In the late 9th-century text of Asser (the Welsh monk and biographer of Alfred later appointed to the bishopric of Sherborne) tells his audience that Alfred king of the Anglo-Saxons 'was born at the *villa regia* called Wantage in that district known as Berkshire.' (Asser, ch. 1, ed. Stevenson 1904; 1; trans. Keynes and Lapidge 1983: 66–67). Asser uses a title resonant with kingship beyond the boundaries of Wessex; Alfred is introduced explicitly as 'King of the Anglo-Saxons' (*Angul*

saxonum rex) rather than 'King of the West Saxons' (*Rex Occidentalium Saxonum*). The memory and genealogy of Alfred's ancestors is emphasised and the link between landscape and the past is indeed an important point for later in this chapter.

The moment of transition to kingship, from being a prince second-in-line to the throne, came in 871 following the battle along the line of the Ashdown hills (the Battle of *Æscesdun*; the Ashdown Hills are commonly referred to as the Berkshire Downs). This is an encounter recorded by Asser with an unusually high level of forensic detail (Lavelle 2010b; Lavelle 2020; Abels 2015: 50–51; for comparison Halsall 2003: 1–2). Asser notes the presence of two divisions of the Viking army drawn up at the hill and the subsequent division of the West Saxon force facing them. Unusually for Asser, who tends to emphasise Alfred's piety, it is the presence of Æthelred in a tent receiving mass which contrasts with the young prince Alfred's impetuous attack on one part of the Viking force before his brother had finished mass. The importance of that battle may be overplayed in the light of the extent of Asser's evidence; it may have been only one of a number of encounters with Vikings — some big, some small — which took place during the year of late 870–71. Nevertheless, the historical sources suggest that the military encounters of 871 moved back and forth along the region of the Thames Valley and into Wessex in that year (Lavelle 2020), highlighting again the significant action taking place in the Thames Valley.

It is the rest of that decade which defines our perception of King Alfred and the West Saxon kingdom, a narrative which continues to engage modern audiences. Although for some of that period the sense of 'Wessex stands alone' portrayed by the *Anglo-Saxon Chronicle* provides something of a smokescreen, as what must have been large payments of money were made to 'Danish' forces, and Mercians participated in an alliance with the West Saxons (Abels 2003; Nelson 1986: 59; for the nature of 'Danishness' in the 9th century, see Roffey and Lavelle 2016: 8–13). The aftermath of the Battle of *Ethandun*, fought in 878 somewhere near Edington (Wiltshire), famously saw a peace treaty made between Alfred and the newly-converted Viking leader Guthrum, leading to division of English territory between Wessex and part of Mercia on the one hand, and an 'East Anglian' kingdom of Guthrum on the other (Keynes and Lapidge 1983: 171–72). As we shall see, the reality is likely to have been far less binary and somewhat more messy, but that moment seems to have given Alfred breathing space for administrative reorganisation and indeed the development of a programme of cultural reform drawing on talent recruited from among Insular and Continental European scholars (Pratt 2007; Keynes 2015: 26–33).

The Thames Valley and its 9th-century significance

A consideration of the Thames Valley region in the late 9th century needs to look to earlier points, to when the West Saxon dynasty, originally known as the *Gewisse*, determined its control of the region during the course of the 7th century. This was intrinsically linked to the 9th century by the remembrance of that past. Indeed, perhaps reflecting Bede, we should note Asser's use of the term *Gewisse* in his description of the West Saxon kingdom when making reference to this region. Beyond Asser's text, the placenames of the region provide evidence of the historical significance of the past in the landscape as the names given to barrows recall

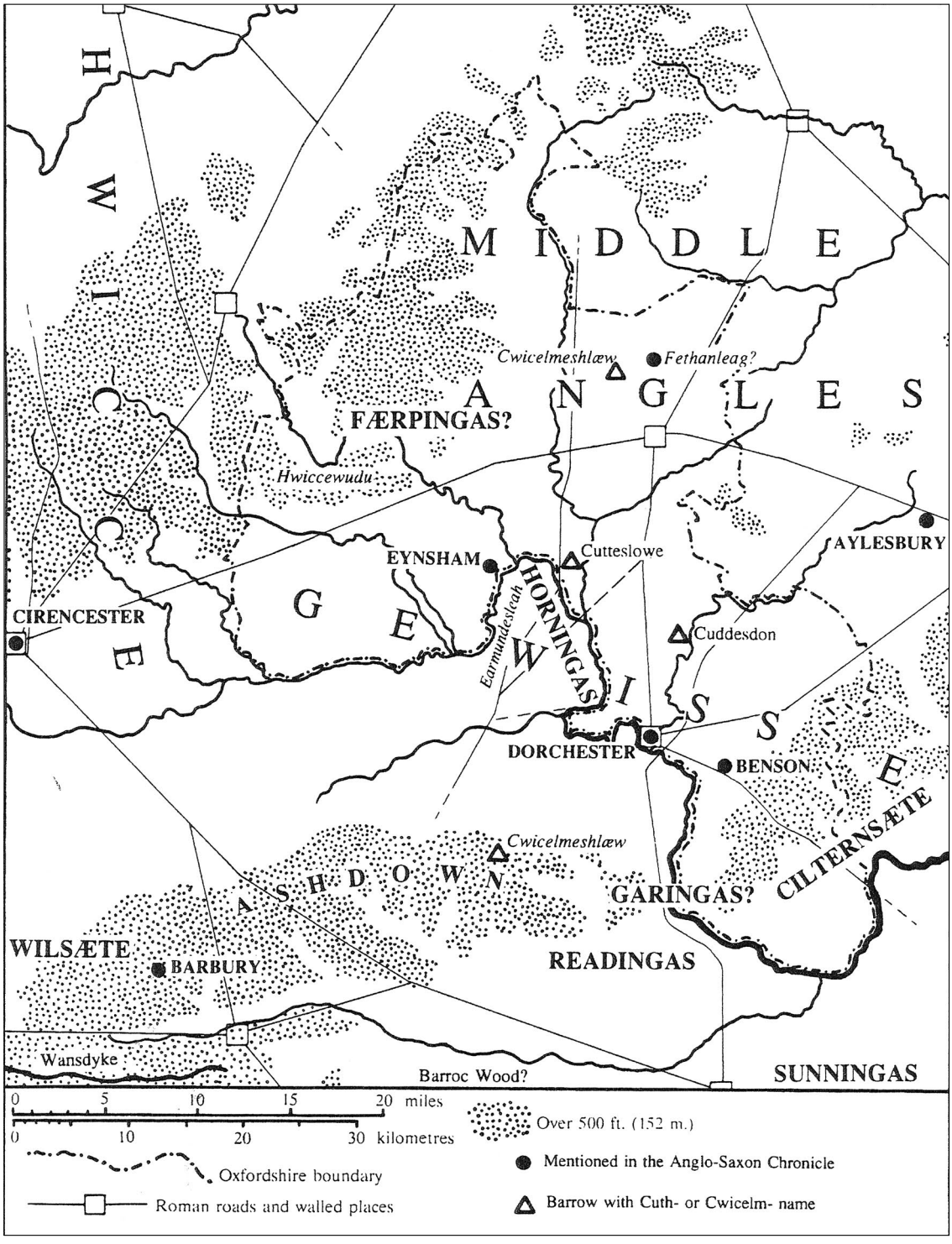


Figure 4.1. The territory of the Gewisse in the early Anglo-Saxon period (after Blair 1994: 36).

names, in part or whole, of those of members of the early West Saxon dynasty: Cuthwine (a late 6th-century son of King Cealwin to whom he may have served as a sub-ruler) in the case of the *Cuth-* element in Cutteslowe and Cuddesden, and Cwichelm, with two barrows known by the name of *Cwicelmeshlæw* (one at Ashdown and another further north near Ardley; all now in Oxfordshire) (Blair 1994: 39; see Figure 4.1). The southern *Cwicelmeshlæw* is recorded in the *Anglo-Saxon Chronicle* entry for 1006, and is located adjacent to the Ridgeway close to the former boundary of Oxfordshire and Berkshire — it is a Bronze Age barrow which was the meeting point of the shire of Berkshire in the late 10th century (now known as Scutchamer Knob (Oxfordshire), an alias for Cuckhamsley Knob or Hill, see Figure 4.2) (Baker and Brookes 2015: fn. 113; S 1454).

The landscape of Ashdown may be at the heart of a territory of the *Gewisse* which continued to be important even though West Saxon interests had been carved out further south around Winchester (Hampshire). The *Cwicelmeshlæw* barrows were named after Cwichelm who was, according to Bede, the West Saxon king who despatched an assassin to kill the Christian figure of Edwin (Bede, *Historia Ecclesiastica* II.9, ed. Colgrave and Mynors 1969: 165), and memorialised Cwichelm and his authority. The barrow makes another appearance in the *Anglo-Saxon Chronicle*'s 1006 entry on the Viking army's escapade as it travelled through Wessex to *Cwicelmeshlæw* — a continuation of its importance in the landscape that harked back to an earlier time and royal ancestor (Williams 2015; Parker 2018: 93–97). Cwichelm's son, Cuthred, is recorded in the *Anglo-Saxon Chronicle* as the recipient of 'three thousand [hides] of land' at Ashdown from his uncle Cenwalh, the founder of the Old Minster at Winchester (*ASC* 648; Plummer 1892–99: 28; trans. Whitelock *et al.* 1965: 19). That this dynastic history, perhaps reflecting the devolution of this West Saxon frontier territory to a sub-king, was seen as important enough to be recorded in the *Chronicle* in the 9th century, and was still significant in 1006, indicates that this was a landscape that evidently mattered to the memory of the *Gewisse*.

While the West Saxon dynasty seems to have had a gravitational focus on the south of the kingdom with particular interests in Winchester by the later 9th century, what may have been a northern frontier in the Thames Valley hardly paled into insignificance. Looking at the hundreds along the Ashdown hills (Figure 4.2), the Battle of Ashdown and the memory of the battlefield is linked to the easternmost arm of the hills, where one can find Nakedthorn Hundred, perhaps sharing its name and historical memory with Asser's battlefield description of a 'solitary thorn tree', which Asser claimed he had seen with his own eyes (Asser, ch. 39; ed. Stevenson 1904: 30; trans. Keynes and Lapidge 1983: 79; Burne 1953; Lavelle 2020). It may have been a tenuous link by the 11th century, when Nakedthorn Hundred was recorded in the Domesday survey, but evidently some sense of historical memory had been created.

Within the Valley's wider landscape there is further association of the West Saxon dynasty. The royal estate at Wantage was where Alfred was born, according to Asser, but it also had other important, later family links. Wantage was bequeathed by Alfred to his Mercian wife along with the estate at nearby Lambourn (now in West Berkshire) and the 878 battle site at Edington, which might be suggestive of some emotional memory associated with these places (S 1507; for Wantage and Lambourn see Lavelle 2007: 99). Another place in the landscape embedded with memory and myth is nearby Wayland's Smithy (Oxfordshire), a Neolithic long

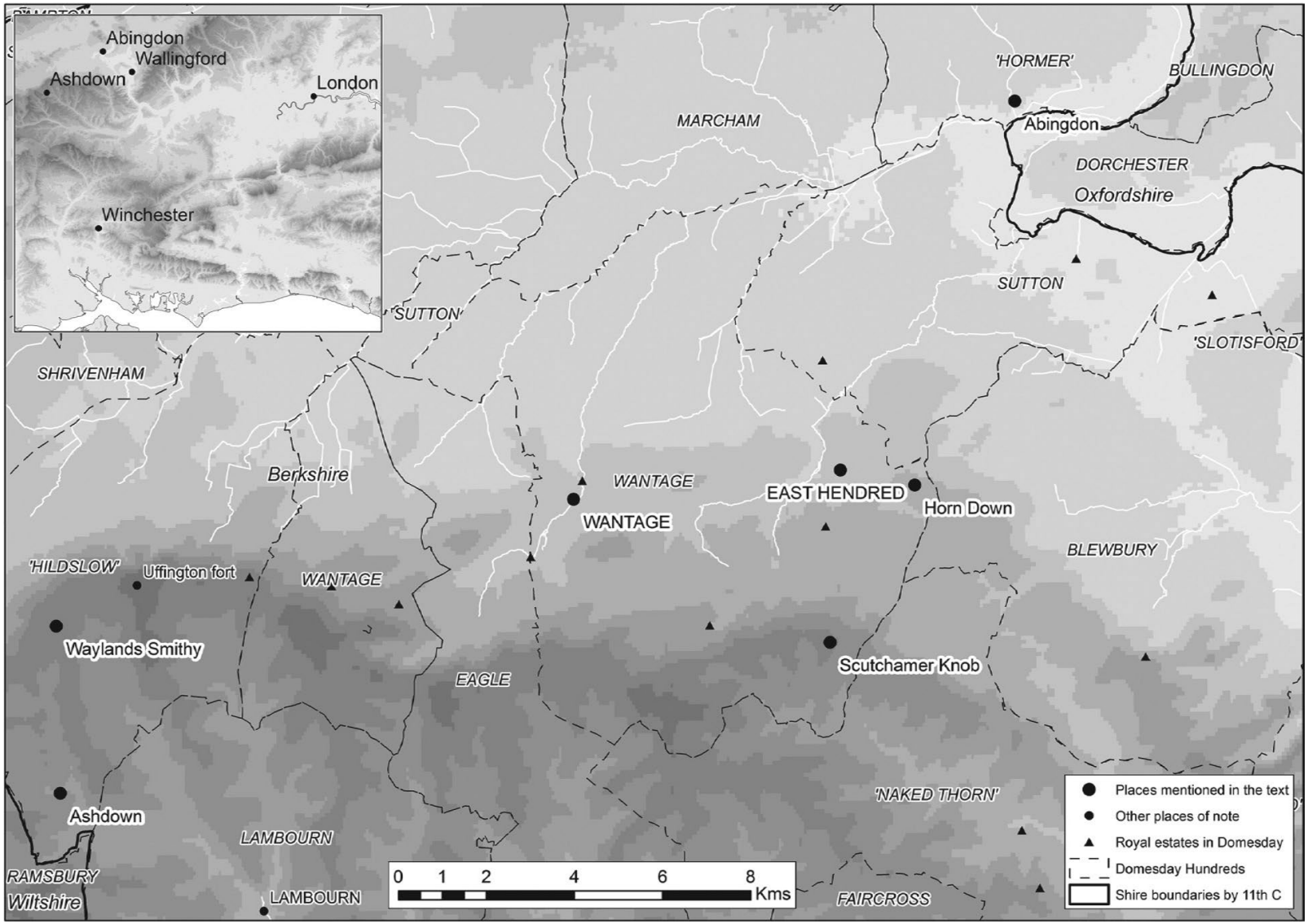


Figure 4.2. The hundreds of Berkshire along the Ashdown hills.

barrow, associated with Weland the legendary smith, held captive in a royal court because of the fine metalwork he could produce. Barbara Yorke (Yorke 2017) has observed that Wayland's Smithy, noted in a mid-10th-century charter bound (S 564), shows an insight into the ways in which the Alfredian translation of Boethius' *Consolation of Philosophy* highlights the memory of the bones of Weland; the human reflection of the Christian experience has a direct link with the superhero figure of Germanic legend. An Alfredian interest in the Weland legend reminds us that the production of treasure was intrinsically linked to the status of a ruler. Asser refers to royal officers, including the great goldsmiths, working with the Alfredian court in the 9th century (Asser, ch. 91, ed. Stevenson 1904: 77; Keynes and Lapidge 1983: 101). A small, late Saxon gold ingot found at East Hendred in 2014 (PAS BERK-842965) may indicate a smithing site located at or near the royal estate of East Hendred, not too far from the mythical smith's resting place, and perhaps comparable with the putative late 10th-century goldsmithing on the outskirts of the royal estate of Broughton (Hampshire) (Rumble 2008: 249–51).

We might also note here a link with the minster at Abingdon (Oxfordshire). Abingdon held a liminal position between Mercia and the West Saxons (Lavelle 2020). Like the community of Durham (Co. Durham) in the 12th century, the monks of Abingdon would have had to deal with political powers to their north and to their south, ensuring that they were in reasonable standing with both. Abingdon seems to have had 7th-century West Saxon origins and the house remained important to the southern dynasty despite Mercian supremacy that seems to have been implicit in Abingdon's receipt of property for much of the period from the 7th to 9th centuries (Stenton 1913: 19–30). It is Abingdon whence the most critical historical memory of Alfred comes (before the 20th century at least); the *Historia Ecclesie Abbendonensis*, compiled in the 12th century, notes Alfred's appropriation of that church's land at Abingdon and equates him with Judas (Hudson 2002–07: 1:32–33 and 272–75). A document in the Abingdon cartulary noted in the *Historia* — a charter recording an exchange of land at Horn Down, East Hendred, for land at nearby Appleford (both Oxfordshire) — saw Alfred receiving unhidated land at Horn Down from his *cellararius*, a man with important connections (S 355; Whitelock 1979). That charter reveals something of Abingdon's liminal position in that it owes as much to Mercian diplomacy as it does to West Saxon (Whitelock 1979; Lavelle 2020) but it may also relate to the abbey's later condemnation of Alfred as Judas. If one of the estates had once been Abingdon property, as the charter's presence in its cartulary may indicate, the low opinion of Alfred could be rooted in what may have been the estate's cavalier treatment by a ruler who saw his familial interests in this region.

The substance of the exchange may be related to a sense of service rewarded by the provision of bookland (land granted by charter), expressed in the preface of a translation, attributed to the king, of another patristic text, the *Soliloques* of St Augustine (Carnicelli 1969: 48; trans. Keynes and Lapidge 1983: 139). A whiff of the possible continuity of service in return for land may be seen in Domesday's record for East Hendred, where the sheriff's wife is said to have kennelled the king's dogs in exchange for tenure of an estate (*Great Domesday Book* fol. 57r, ed. Morgan 1979: 1:38; see Lavelle 2014 for 2011: 38–39). There is not much of a leap from the keeper of food and drink to the keeping of royal dogs. This notion of the reward for service was a significant issue in the later 9th century.

Wallingford and Watlington in the 9th century

East of the Ashdown hills are Wallingford and Watlington, the former on the edge of the historical county of Berkshire and the latter within historical Oxfordshire. Wallingford is the key to the Thames frontier. David Roffe's important work on tenure makes sense of the Berkshire entries in Oxfordshire Domesday, providing consideration of the links between Domesday vills and the records of houses in the town of Wallingford, which may reflect some continuity of service in the maintenance of the burh (*Great Domesday Book* fol. 56r, ed. Morgan 1979: B9; Roffe 2009). The key to this is the document associated with Alfredian memory known as the Burghal Hidage, which seems to go beyond shire boundaries where necessary, and perhaps reflects a flexible attitude to the administration of land for defensive purposes and a readiness to reorganise in a manner which went beyond existing boundaries if the occasion arose. I wonder if, had Berkshire not become so embedded in the historical memory before the late 9th century (perhaps even as far back as the 7th century, if the *ASC* 648 entry is anything to go by), we might otherwise have seen the emergence of Wallingfordshire alongside Oxfordshire by the 10th century.

A very relevant piece of evidence for the historical landscape which relates to Watlington is a Worcester charter of the 880s (probably of 887). It records that Æthelred 'by gift of the abundant grace of the Lord *dux* and *patricius* of the Mercian people, granted with *licentia* and *inpositione manus* of Alfred, king' (S 217) land to the bishopric of Worcester, which included eight hides at Watlington. This charter does not seem to relate in any way to the maintenance of the burh of Wallingford but this is evidence of Mercian royal territory used for purposes of the emergent (though by no means inevitable) 'Kingdom of the Anglo-Saxons'. This was a kingdom which had, from both an Alfredian and Æthelredian perspective, close connections to Worcester. The very careful language of the charter is indicative of the diplomacy which the Mercian kingdom may have found it necessary to employ, something commensurate with what Charles Insley, in a recent article on 10th-century Mercia, has noted was a negotiated position (Insley 2016). In the charter, Æthelred is the *dux* and *patricius* of the 'Mercian people', at once both emphasising his status but in no way overstepping his position towards one of kingship; here it is worth noting that Æthelred owes his position to God's authority. Alfred, by contrast, is simply *REX*, a term which acknowledges his superiority but does not admit to any suzerainty by him over the territory of the Mercians.

There are other phrases within the Worcester charter which are diagnostic of the power relationship between Wessex and Mercia. '*Cum licentia*' occurs in Mercian and Kentish charters, and occasional 10th-century charters relating to this Thames Valley region rather than West Saxon charters *per se*. Mercian influence was an important issue in 9th-century Wessex (Whitelock 1979), but the idea of '*licentia*' seems important and an indication of the projection of the power relationship within this zone. '*Inpositione manus*', translated by Keynes (1998: 27) as 'sign manual', appears to be unique in the charter corpus, but it seems to indicate the subordinate position of Æthelred in the charter. Given the ceremonial demonstration of subordination prevalent in the Carolingian world, it may not be too far-fetched to consider the reference to hands in *inpositione manus* in 'feudal' terms — as an early reference to a ceremony involving the placement of a lord's hands around those of a subordinate.

The eight hides of land at Watlington recorded in S 217, along with six hides at Brightwell Baldwin and six men 'and their progeny' at Benson were said to belong to the church of Pyrton (all Oxfordshire), referred to as the *Readanoran* (the 'Red *Ora*') in the charter (referring to a specific type of hill until the late 10th century; Gelling and Cole 2000: 203–10); ultimately the land was intended for the church of Worcester, although it had somehow come into the hands of Archbishop Stigand by 1066 (*Great Domesday Book* fol. 157r, ed. Morris 1978: 15:2). That the charter refers to the 'progeny' of the men at Benson is an indication of an Alfredian sense of the future for the holding of the land, a phrase which echoes the peace agreement made between Alfred and Guthrum which was 'for the living and the unborn' (trans. Keynes and Lapidge 1983: 171; see below, this chapter). In his study of Anglo-Saxon slavery, David Pelteret observed that these men were not slaves (Pelteret 1995: 168), so perhaps it is better to consider them as tied to the land in the form of *geburas*, suggesting that the 'six men' were an equivalent of six hides of land, given that 'hide' was simply a term used as a synonym for household, *familia*. Here this was perhaps simply just a different way of referring to the conditions of the holding of the actual land, and thus a reference to the productive capacity of the land which was granted.

What's in a name? Ceolwulf and 'Hostage's Back'

Consideration of the relationship between Ceolwulf II of Mercia and Alfred provides the opportunity to reassess a text which does not normally leap to mind in views of the 9th century. The words of Geoffrey Gaimar, in his Anglo-Norman vernacular *Estoire des Engleis* written in the 12th century, remark on those who came to see King Alfred in 878, 'Ceolmer came to him and Chude / with the *baruns* of Somerset / Of Wiltshire and of Dorset / From Hampshire came Chilman / Who had summoned the nobles by *ban*.' (Gaimar lines 3162–3166; ed. Short 2009: 174–77; trans. here from Lavelle 2010b: 180).

Although 12th-century sources of Anglo-Saxon history are notoriously problematic, and Gaimar's intentions were more complex than providing historians with a reliable stock of hitherto-untapped sources (Freeman 1996), it is surely significant that these are alliterative Anglo-Saxon names, unrecorded in this context elsewhere. Gaimar made reference to a 'chained' copy of a chronicle which he had seen in Winchester (Campbell 2001: 15–16). This is sometimes thought to have simply been the A manuscript of the *Chronicle* but it may have been a version of the 'Common Stock' of the *Chronicle* used by the West Saxon royal house at the end of the 9th century. When considering these names a few years ago, I thought of them in terms of West Saxon name stock (Lavelle 2010b: 180–82). In the light that the number of examples of the Two Emperors type coins from the Watlington Hoard shines on the Ceolwulf II–Alfred relationship, a close relationship which may have been invoked by the symbolism of two rulers, I am now struck by the absence of Ceolwulf from a set of names, two of which had the element *Ceol*–, which could easily have included him. What if Ceolwulf and the thegns of Berkshire had originally been included among the list of the loyal supporters in a version of the *Chronicle* which pre-dated that seen by Gaimar? This is not altogether fanciful. Ealdorman Æthelweard is thought to have had access to a south-western version of *an* Old English chronicle related — but not exactly the same as — the 'Common Stock' annals while writing his 10th-century Latin chronicle (Barker 1967; Ashley 2007). Æthelweard reveals that the body of the ealdorman Æthelwulf who died at Reading in 871 was taken to 'Northworthy' (i.e. Derby, Derbyshire),

suggesting that even if he had responsibilities to Wessex he was of Mercian origin (Stenton 1913: 26–27). This is a detail typical of Æthelweard's interests in the work and lives of his fellow ealdormen which are edited out of the 'official' version of the *Anglo-Saxon Chronicle* (Lavelle 2016). The detail of Æthelwulf's Mercian connection, evidently seen as unwanted in a West Saxon narrative of the late 9th century, may indicate that this was a zone of joint control.

Based on a tentative dating of the Two Emperors type coin issue, Jinty Nelson suggested that this type of coin may have been a joint commemoration of Ceolwulf II's participation in the Battle of Edington (Nelson 1986: 60). The scale of the issue of this coin type is obviously now known to be larger than it appeared in the 1980s, suggesting that it was more than a mere token of commemoration. Nonetheless, this type of coin, as well as cooperation on the production of the Cross-and-Lozenge type, is strongly suggestive of a link between Alfred and Ceolwulf (see Naylor, Chapters 5 and 6, below). If the coin design reflects that the alliance stretched to mutual military aid, Gaimar's record may be a reading of the participants in the battle, reflecting the West Saxons' post-879 editing-out of Ceolwulf's name from a list that would otherwise be likely to include him. We are given a clue that the reputation of Ceolwulf was tarnished retrospectively by the time of the composition of the *c.*892 'Common Stock' of the *Anglo-Saxon Chronicle*, which placed such a negative reading on the submission of Ceolwulf to the Vikings after the departure of Burgred:

> And in the same year they gave the kingdom of the Mercians to be held by Ceolwulf, a foolish king's thegn; and he swore oaths to them and gave hostages that it should be ready for them on whatever day they wished to have it, and he would be ready, himself and all who would follow him, at the enemy's service [7 *he gearo wære mid him selfum,* 7 *on allum þam þe him læstan woldon to þæs heres þearfe*]
>
> (*ASC* 874, ed. Plummer 1892–99; 1:72; trans. Whitelock *et al.* 1965: 48)

We can be reasonably certain that the relationship between Alfred and Ceolwulf II indicated by the jointly-issued Two Emperors type coinage around the later 870s was somewhat better than the opinion evidently expressed in the *Chronicle*'s entry for 874.

The difference between that 'official' narrative of the West Saxon kingdom and any earlier historical record is brought into relief by Æthelweard's laconic reading of the position of Ceolwulf. Æthelweard notes that '[a]t that time [i.e. 874] Ceolwulf held the kingdom of the Mercians' (Æthelweard, s.a. 874, ed. Campbell 1962: 41). Given that the record of Ceolwulf here is in the same place as the criticism of him in the 'Common Stock' Annals, Æthelweard's text feels like it is a reflection of the original record of Ceolwulf's position in Mercia, prior to it being spun for a post-878/79 West Saxon audience.

I wonder if the retelling of the narrative was also going on through the landscape. The S 217 charter may reveal this and further highlight the relations between West Saxons and Mercians in the late 9th century. Among a number of locations in the charter's bounds which reference personal names, there are two specific points at the land at Brightwell Baldwin which merit comment: *ceolulfes treowe* ('Ceolwulf's Tree') and *Gisles Bæce* (Figure 4.3). *Ceolulfes treowe* is a boundary marker, and Stephen Mileson and Stuart Brookes have suggested a link with a

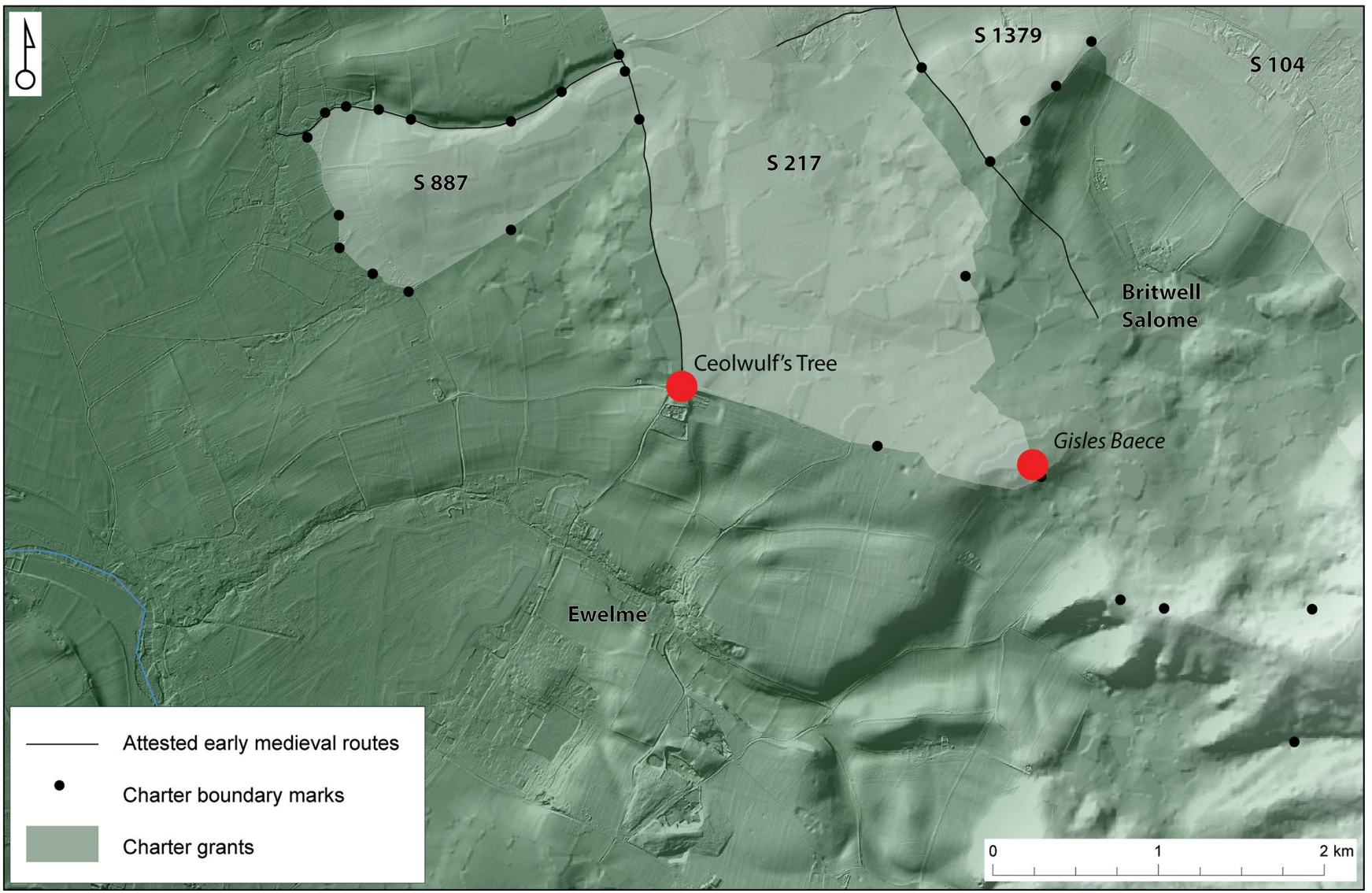


Figure 4.3. 'Ceolwulf's Tree' and 'Hostage's Bæce' recorded in the bounds of the charter S 217 relating to land at Brightwell Baldwin (to the west of Watlington; see Figure 3.1, above).

historical Ceolwulf as a possible explanation (Mileson and Brookes 2014). To the east is *Gisles Bæce* which may be read as 'Hostage's Back'. Prior to the discovery of the Watlington Hoard, in a work about the theatre of hostage-giving, I noted the possibility of *Gisles Bæce* as one of a number of places where a formal submission of hostages might have taken place, rather like the 'hostage mounds' known from early Irish traditions (Lavelle 2017: 46–49). Despite my original hopes when investigating them, many of the *Gisl* place-names are likely to be personal names, but *Gisles Bæce* seems to be specifically a reference to a hostage (see Lavelle 2017: 47–49). Moreover, although *bæce* is used in a few charters to refer to a stream, here it is not used as such, and may be read as *bæc*, as in a 'back' or ridge. It may be identifiable in the landscape as a pronounced hill in the south-east corner of the parish (Mileson and Brookes 2014; forthcoming; for this type of hill see Gelling and Cole 2000: 144).

The connections may be speculative — indeed there are fifteen instances of the personal name 'Ceolwulf' in the *Prosopography of Anglo-Saxon England* corpus (PASE *s.v.*) and a 6th-century West Saxon king of that name (*ASC* 597, ed. Plummer 1892–99: 1:20; trans. Whitelock *et al.* 1965: 14;) — but it is too important to pass up lightly the possibility that there was at least an association with Ceolwulf II of Mercia. Here the *Anglo-Saxon Chronicle*'s 874 entry, noting that King Ceolwulf had given hostages for the holding of his kingdom is relevant to a zone where West Saxon control met Mercian control, and where Vikings had attempted to assert their own control of this landscape in the early 870s.

And although it must be stressed that this was not the Watlington Hoard's findspot, a connection between text and landscape warrants comment. Not only is Ceolwulf II said to have given hostages to Vikings in 874 but the text of Alfred's treaty with Guthrum refers to hostages given from one side to the other when moving between territories, so that a 'clean back' can be seen. Writing about the treaty, Paul Kershaw made a logical link with cleanliness and religious purity (Kershaw 2000: 54) but the 'back' of a pronounced hill is a detail which warrants notice here. Given that the whole relationship between Wessex and Mercia is directly linked to the control of territory at this point in the landscape, and, moreover, the territorial control of the zones delineated between Danish-held Mercia and English-held Wessex became defined around the early 880s in this region, the 'hostage's back' would have had some deeper meaning.

Towards a redefinition of the frontier of Wessex

This is thus a landscape where royal connections may be seen in the written evidence related to it: the duty of kennelling dogs in Domesday Book may take us to Alfred's Horn Down exchange at East Hendred, and indeed Asser's reference to Alfred and hunting dogs (Lavelle 2020). These clues are there as a memory in the landscape — part of its story. This does not mean that this was *the* Ceolwulf or *the* place where hostages were exchanged before cross-border transactions could take place by the conditions of the Alfred-Guthrum treaty; but in the circumstances of the late 880s creation of a charter for Alfred's man in Mercia, they could have become part of the story embedded in the landscape (cf. Mileson and Brookes 2021: 92–94). Ceolwulf became the 'foolish king's thegn' only after a point where the new Wessex-linked ealdorman of the Mercians was active in the area of the Thames Valley. In 878, the West Saxon

kingdom had moved from having a Mercian ealdorman working as its man in Berkshire, to a Mercian ealdorman married to the king's daughter Æthelflæd. Any buffer-zone provided by Mercian territory between Wessex and 'the army that is in East Anglia' was very narrow indeed in this region.

To that end, Wallingford (mentioned as being a key strategic point in the late 9th-century/early 10th-century *Old English Orosius* (ed. Godden 2016: 334–35)) may have played a role in determining the frontier of these two territories, joining them together. Here Baker and Brookes's (2013: 325) consideration of Oxford as 'something of a misfit' in a network of fortifications may be instructive in highlighting its Mercian origins.

In line with Scott Thompson Smith's reading of parts of the text of the *Anglo-Saxon Chronicle* as a boundary (Smith 2010), it is worth considering that text's link with the Alfred-Guthrum frontier established in the agreement of the two rulers. The frontier line of this treaty represents an adjustment, perhaps even the creation of a frontier in the early or mid-880s when West Saxon dominance over or possession of London became such a significant issue (Naismith 2018). London is normally considered as the defining issue in the text of the frontier but the significance of this can be seen further west: in 878 there was no need for a defined frontier between the West Saxons and the Viking army because an independent Mercian kingdom was in existence; there would simply be no point in creating a treaty boundary in 878. Later, Ceolwulf was off the scene as a political player — a figure to be relegated — so there was far more sense in constructing a new frontier. Therefore, we may have a reflection of the reconstruction of West Saxon territorial interests, perhaps in line with the ways in which the fortified northern frontier of the kingdom was developing in the late 9th century (Baker and Brookes 2011; for the Alfred-Guthrum treaty delineation see Marriott and Ashby 2020).

We might be able to see a reflection of these interests in the way in which the *Anglo-Saxon Chronicle*'s 'Common Stock' was constructed, perhaps in the late 880s or early 890s. Although the *Chronicle* may record genuine early annals of the West Saxon kingdom, the choices of the selection of these annals show the way in which the identity of the kingdom was being constructed in the late 9th century (Yorke 1993; Konshuh 2020). Along the Thames frontier, the selection of annals may extend to reference the places that the West Saxon ancestors were considered as contesting and controlling in the 6th century (Figure 4.4). Although the traditional narrative of West Saxon history has these as conflicts with Britons (and indeed they probably were), the territorial interests with which the sites of conflict were frequently concerned, often relate to the western reaches of the Thames Valley in territory bordering and even encroaching on that of the Mercian kingdom. Indeed there is a clutch of places to the north of the Lower Thames Valley, up into what is now Oxfordshire and indeed beyond, which included the record of the '571' Battle of Limbury and would have been of great importance to a late 9th-century West Saxon audience. Limbury (Bedfordshire, now incorporated into Luton) is at the very source of the River Lea, a location which is mentioned as a key boundary point in the text of the Alfred-Guthrum treaty (*ASC* 571, ed. Plummer 1892–99: 1:18; trans. Whitelock *et al.* 1965: 13; Keynes and Lapidge 1983: 171).

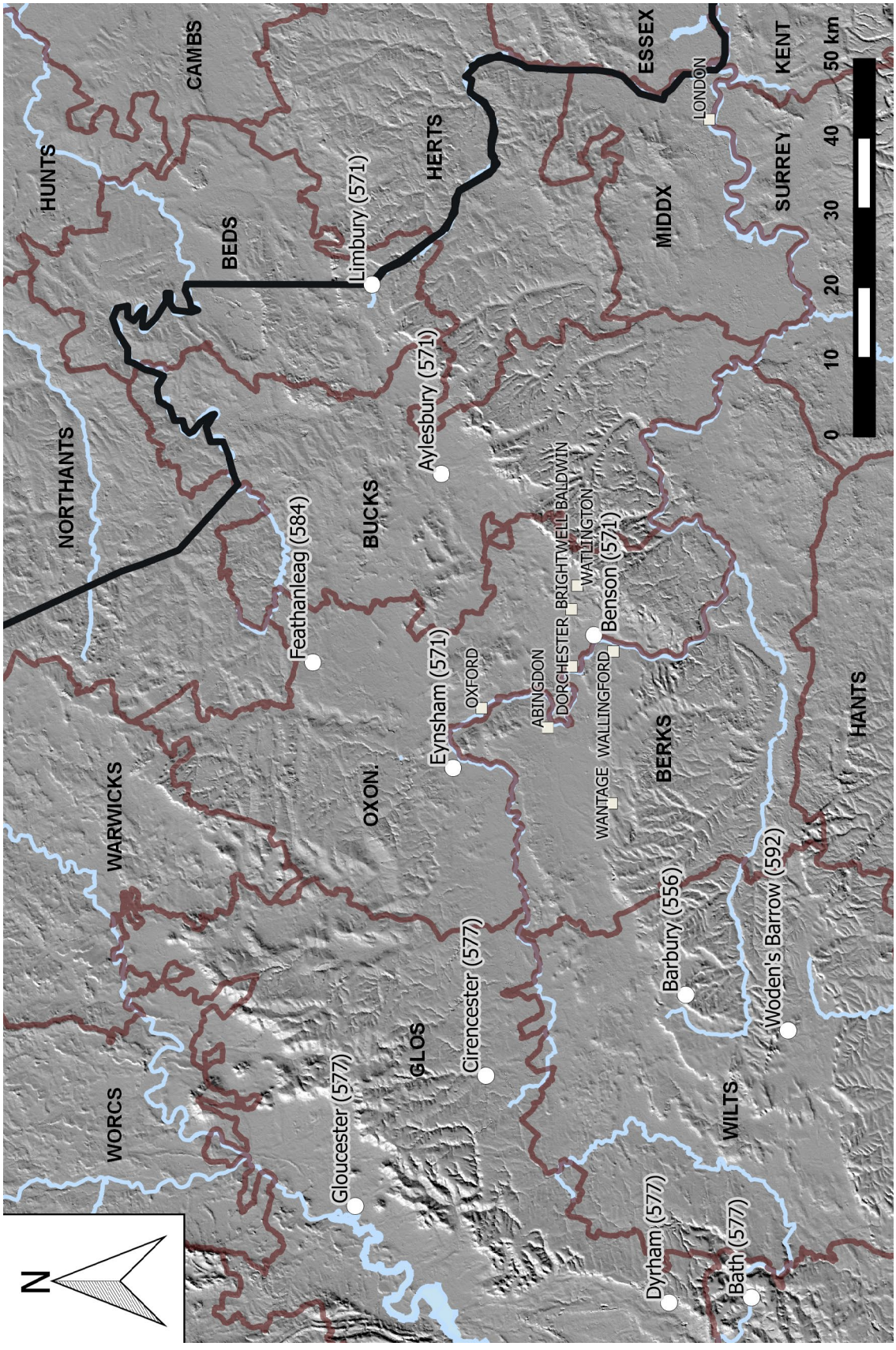


Figure 4.4. Sites named in the Anglo-Saxon Chronicle associated with the early West Saxon dynasty (with annal year), along with other significant places and the line of the treaty dividing territory between King Alfred and Guthrum.

Thus, earlier West Saxon rulers, figures linked to the genealogy of Alfred — many of whom were recorded by both the Common Stock of the *Anglo-Saxon Chronicle* and the text of Asser — are linked to a textual construction, a philosophical construction even, of a kingdom which is written in the text and in the treatment of the landscape. To that end, it is entirely fitting that in the early 880s a cache which included coins whose very design reflects the close link between Mercia and Wessex should have been deposited close to a location where the interstices of that relationship could be most visible in the landscape. It is yet more fitting that it should have been at a time when the relationship itself was going through such a fundamental transformation.

Acknowledgements

I wish to record my thanks to the editors for inviting me to speak at the Watlington Hoard conference and for their helpful suggestions in the preparation of this chapter. I am also grateful to Stuart Brookes and Gareth Williams for their discussion of aspects of this paper, and to this volume's anonymous referees for their comments.

Chapter 5

The coinage of Wessex and Mercia, *c.*875–79: a re-assessment of the Two Emperors and Cross-and-Lozenge types

John Naylor

The discovery of the Watlington Hoard presents an important opportunity to undertake a new and detailed study of the coinage of the late 870s. Of the 203 coins found in the hoard, 200 are rare silver pennies of the Two Emperors and Cross-and-Lozenge types struck for the kings of Wessex and Mercia, and the Archbishop of Canterbury (Cross-and-Lozenge only). The corpus roughly quadruples the overall numbers of these coins known previously; earlier finds were published by Blackburn and Keynes (1998), and together with the subsequent discoveries have produced a corpus, at 72 coins, still far smaller than the Watlington Hoard (see Appendix 1). A mixture of stray finds, hoard finds and finds for which no recovery or findspot details survive, this pre-Watlington corpus highlights further the importance of the numismatic element of the Watlington Hoard. This chapter discusses the classification of the Two Emperors and Cross-and-Lozenge type issues, mostly from a stylistic perspective, providing an appraisal and re-assessment of this earlier scholarship. Where appropriate, revisions and additions to this body of work are suggested. The classification produced in this chapter forms the basis for discussion in the next chapter, where the coins in the hoards are examined from the perspective of their collection and deposition as a group in the late 870s/early 880s alongside the other coins and objects (Naylor, Chapter 6), and for the entries in the final catalogue (Catalogue 2).

Figure 5.1. Example of the Two Emperors coins of Alfred the Great (cat. 2.61*; moneyer: Dudecil) and Ceolwulf II* (cat. 2.4*; moneyer: Cuthberht) from the Watlington Hoard. Scale 2:1.*

The discussions which follow are a comprehensive re-assessment of previous work and put forward a fully revised classification (see Baker, Chapter 8, for broader discussion of these types within the coinage of the mid–late 9th century). Summaries are provided at the end of each section below to outline the main points discussed. A visual guide to the Two Emperors and Cross-and-Lozenge types, providing basic descriptions for each style and sub-style, can be found at the back of the book in Appendix 2; a simplified table of moneyers for both types is presented in Appendix 3.

The Two Emperors Type (*c.* 875)

There are 13 Two Emperors type pennies in the Watlington Hoard, ten of Alfred the Great of Wessex (871–99) and three of Ceolwulf II of Mercia (874–79?) (Figure 5.1). This significantly increases the previously published corpus of two coins which comprised one example for each ruler (Appendix 1 nos 2–3). Based on a late 4th-century Roman gold *solidus* (Figure 5.2), the obverse shows the bust of the emperor, facing right; the reverse the emperors of the Eastern and Western Empires seated holding an orb between them with a winged Imperial Victory above. Given the very real threats posed by the Viking Great Army at the time, it is likely that the reverse iconography was a useful symbol meant to publicly represent an alliance of some form between the two kings although it should not be forgotten that this was a coinage utilising an earlier Roman design during a period when such copying was not uncommon (Blackburn 1998: 113; Williams 2008: 56). The dating for the Two Emperors remains tentative at around 875. Generally considered to be short-lived and placed early in the reign of Ceolwulf II prior to the introduction of the Cross-and-Lozenge coinage (e.g. Naismith 2017: 168–69), the much expanded corpus provided by the Watlington Hoard allows, for the first time, a real assessment of this coinage including consideration of the potential length of issue.

The Watlington coins contain only a single die-linked pair of coins (dies TEo11 and TEr11; **cat. 2.66–67**) and there are no die links to the previously published coins. Ten moneyers are known in total (Table 5.1), seven in the Watlington hoard, plus three others from the previously-recorded coins and the 'near Leominster' hoard (see Naylor, Chapter 9), divided to give five working for Ceolwulf II and six for Alfred. Only a single moneyer, Beagstan, struck for both rulers in the Two Emperors issue (**cat. 2.3**, **2.59–60**).

Figure 5.2. Late Roman gold solidus of Two Emperors type, the prototype for the design used by Alfred and Ceolwulf II. This example is in the name of the Emperor Gratian (367–83) and was struck at Trier (Germany). Scale 2:1. Image: PAS DENO-75191A

Obverse Style

Five basic obverse styles can be identified based around the nature of the drapery (Figure 5.3). Styles 1 and 2 take their influence from the originals on the Roman *solidi*, Style 3 and 4 from elsewhere. Style 5 harks back to later 8th and 9th-century coin design; it is not seen in the Watlington Hoard.

Style 1 is the carefully rendered bust close in style to the Roman prototype seen on the previously published coin of Alfred (Appendix 1 no. 2, Cenred) and on a single coin of Alfred from the Watlington Hoard (**cat. 2.64,** Eadulf). Style 2 is considered the equivalent style for Ceolwulf II although the Roman drapery is simplified and stylised in comparison to Style 1 (**cat. 2.3–4**, Beagstan and Cuthberht; Appendix 1 no. 3, Ealdwulf), and exhibits greater variation. Both Style 2 Watlington Hoard coins have an annulet on the left shoulder, a feature lacking on the Ealdwulf coin (Appendix 1 no. 3) although this and Cuthberht's (**cat. 2.4**) show similar bust style.

*Figure 5.3. The Two Emperors coinage by obverse style. Top left: style 1 (*cat. 2.64*); top right: style 2 (*cat. 2.4*); bottom left: style 3 (*cat. 2.59*); bottom right: style 4 (*cat. 2.5*). Scale 2:1.*

The former is somewhat less refined, but both share features with a number of Ceolwulf II's Cross-and-Lozenge coins (for example, **cat. 2.15**, **2.27–29, 2.32, 2.34, 2.37**). The coin of the moneyer Beagstan (**cat. 2.3**) shows a further simplified design. The drapery and portrait on this coin are missing the hair on the neck beneath the diadem seen on other coins. It has parallels from the Cross-and-Lozenge corpus, the portrait and bust very similar to a coin of Alfred (**cat. 2.104**), and pre-Cross-and-Lozenge issues including Alfred's Lunettes type (e.g. group 1 variant IIA: Lyons and Mackay 2008: 47).

Nine of the ten coins of Alfred belong in Style 3 making it the largest group of Two Emperors pennies in the Watlington Hoard (**cat. 2.59–63, 2.65–68**). Its obverse is influenced by earlier 9th-century coin design rather than Roman prototypes although maintains the neat face of Style 1, albeit within more variable parameters. The main element in the Style 3 bust is the much simplified drapery comprising a curved neckline with two triangular shoulders either side, and a range of motifs on the breast and within the 'shoulders'. There is visible influence from the small-scale reform issues of the mid-870s such as the Portrait-Quatrefoil type where this simplified drapery is seen on the only complete surviving example for Archbishop Æthelred of Canterbury (Blackburn and Keynes 1998: 130–31); elements of the Lunettes-style drapery from the 'middle' and 'late' phases of Burgred's Lunettes and of Alfred's issues with obverse styles H and C are also visible (Naismith 2017: 159–63). Blackburn and Keynes (1998: 130–31, no.4) highlighted the similarities between the overall obverse design of the Portrait-Quatrefoil type and the Two Emperors type with the inscription starting at the shoulder on Alfred's coin and the right-facing diademed bust which breaks an inner circle. The similarities in the bust design used on both coin types brings the two issues more closely together. In addition, the style seen on the complete Archbishop Æthelred Portrait-Quatrefoil type penny is mirrored on the Two Emperors by the large-pellet diadem and defined neck and chin, although both are larger and stronger on the Two Emperors type coins.

Style 4 is markedly different. It is seen on a single coin of Ceolwulf II (**cat. 2.5**: Hereferth) with drapery gathered together in the centre of the breast at a large annulet containing a pellet, a design without a direct parallel in earlier coin issues of the 9th century. The portrait also diverges from other Two Emperors coins with its bonnet-enclosed hair, long nose and hair visible below the diadem on the neck, all perhaps related to that seen on the Lunettes type issues of Alfred (e.g. Naismith 2016: nos 1347 and 1349). The annulet placed centrally on the breast is mirrored in Alfred's Cross-and-Lozenge type coins of London Style 6 and a potential

West Mercian group (for both, see below) albeit the overall designs are somewhat distinct from each other, and it is difficult to assess the relationship between these groups (if any) from the currently available evidence.

A fifth obverse design — Style 5 (not illustrated) — is seen in the 'near Leominster' Hoard (Hoverd *et al.* 2020: 50). The face is similar to **cat. 2.4** but the stylised armour and drapery represented by rounded shoulders and breast is, in many ways, akin to the Open Cross type but a more suitable parallel is found in the London series of Offa's Light Coinage (e.g. Naismith 2016: nos 65, 75, 79–80, 82–83, 1213–99).

Reverse style

The reverse style closely copies the Roman original, and is highly consistent across all examples of both Ceolwulf II's and Alfred's Two Emperors pennies. The winged Victory above the figures is formed of two curving lines with linear 'feathers' beneath (Figure 5.1). These join in the centre below the face on **cat. 2.3–4**, and on the other coins (**cat. 2.5**, **2.59–69**) the wings are joined by two (or three) horizontal lines above which is the face with pellet eyes and hair. Below is either a fan-shaped motif of three (**cat. 2.5**, **2.59**, **2.63**, **2.67**) or five lines (**cat. 2.60**, **2.62**) ending in pellets, a pellet (**cat. 2.64**) or nothing (**cat. 2.61, 2.68, 2.69**). Below the winged Victory, two figures sit facing each other with bent knees, their heads turned to face outwards showing pellet eyes and a thin wedge nose, and pellet hair above. Between is a globe with saltire above and a palm frond below. Spaces around are filled by small pellets, and three sides are formed of larger pellets.

Inscriptions

The Two Emperor's pennies are consistent in their style of obverse inscription, following the precedent already seen in the previously published coins (Blackburn and Keynes 1998: 131–32). The inscription begins at the left shoulder in a clockwise direction; all of Alfred's coins begin with an initial cross and two of Ceolwulf II's (**cat. 2.3–4**; the latter formed of four pellets), the other (**cat. 2.5**) having no initial mark.

The inscription on Alfred's coins reads either +ÆLFRED REX ÆNGLO(+) or +ÆLFRED REX ÆNGLO(X) depending upon whether the final letter/mark is considered to be X or +, the latter a possibility given that the inscription runs shoulder to shoulder and these could be seen as crosses flanking either side of the bust. However, it is not seen on two dies (obverse dies TE04 and TE011, **cat. 2.59, 2.66–7**), both of which also have smaller, rounder portraits lacking the defined pointed chin of the other examples (see Figure 5.3). In all cases the lettering is small and neat.

Ceolwulf II's Two Emperors pennies (**cat. 2.3–5**) show greater variation in lettering styles and inscription but all use the same spelling of Ceolwulf with an 'E' rather than 'I', which is now accepted as an early version of the spelling at London rather than a West Mercian variant used at a mint in that region (Blackburn 2003: 213). The three Watlington Hoard examples, although not the previously published coin (Appendix 1 no. 3), describe Ceolwulf II as King of the Mercians using REX M or REX MER.

Summary

The coins of Two Emperors type in the Watlington Hoard are immensely important to furthering our understanding of the type and its status in reform coinages of Alfred and Ceolwulf II. The ten moneyers and five bust styles now identified from all available evidence, most of which comes from Watlington, shows that the Two Emperors series was larger than previously suspected, and that it was likely of greater longevity. The latter point is the most significant; the combination of moneyers and styles, along with parallels in the Cross-and-Lozenge coinage, suggest that its production could have taken place alongside that of the Cross-and-Lozenge type, at least in that issue's earlier phases. This would suggest a date from *c.* 875 for its introduction is sensible, although the overall length of the issue is hard to evaluate. However, the Roman-style busts of Styles 1 and 2 probably follow Styles 3 and 5 which are clearly influenced by earlier coinage, as appears to also be the case in the Cross-and-Lozenge, although it is interesting that no Two Emperors coins are known with Lunettes type busts.

The moneyers known for the Two Emperors suggest probable attribution to London as there are links both to Lunettes and Cross-and-Lozenge coins from the city, and the styles of some of these dies are paralleled in London Style coins of the latter type. A connection between the Style 4 bust of Ceolwulf II and the similar drapery design, gathered at the neck, seen on later coins of the Cross-and-Lozenge type arguably from Mercian mints is worth noting although there are significant differences (see below and **cat. 2.180–87**).

Overall, the evidence of the Two Emperors coinage from the Watlington Hoard confirms that it was a fully-fledged coinage struck in large numbers and not designed as a propaganda or commemorative issue struck over a very short period. The interpretation of such a design that evokes a powerful visual message of alliance should not be dismissed, however.

The Cross-and-Lozenge Coinage (c. 875–79)

The Cross-and-Lozenge type coinage was produced for Alfred, Ceolwulf II and Archbishop Æthelred of Canterbury (870–88) and is named after the reverse design of a long cross with a lozenge-shaped centre containing a cross or saltire (Lyon 1968: 236). Given the low numbers of finds and lack of substantial hoards prior to the discovery of the Watlington Hoard, only a broad date for production within the reign of Ceolwulf II (874–*c.* 879) is generally accepted (Naismith 2017: 168–69), although Lyons and Mackay (2008: 64–65) argued that Alfred's Lunettes coinage was longer-lived than previously suspected, and the Cross-and-Lozenge coinage was not introduced until late 877 if the overall sequence proposed by Blackburn and Keynes (1998: 125) is correct, with other post-Lunettes issues pre-dating the Cross-and-Lozenge type, only one of which, the Two Emperors, includes examples in the name of Ceolwulf II.

The 186 Cross-and-Lozenge type pennies in the Watlington Hoard greatly increase the overall corpus and enable a general reassessment of previous work on the series here. The fundamental work by Mark Blackburn and Simon Keynes (1998) identified a range of styles attributable to different die-cutting centres, in all likelihood also equating to the same mint places too, on

Figure 5.4. The Cross-and-Lozenge coinage: 'Transitional' Style obverses. Top: cat. 2.69, 2.70*; bottom:* cat. 2.71, 2.72. *Scale 2:1.*

account of the careers of a number of moneyers. These styles — the Canterbury Style, London Style, Winchester Style plus others which may point to minting in West Mercia — form the basis of the ordering of the catalogue and the discussion below to which an additional 'Transitional' Style has now been added. Each will be discussed separately.

The 'Transitional' Style (Figure 5.4–5.6)

The obverse style on a group of four coins in the Watlington Hoard (**cat. 2.69–72**; Figure 5.4) differs from that on all other Cross-and-Lozenge type coins in that the bust is enclosed within an inner circle. Such a design is known from some of Alfred's early reform coinage produced between the Lunettes and the Cross-and-Lozenge, including the Two Emperors (Figure 5.3; see also **cat. 2.59–68**) and Archbishop **Æ**thelred's Portrait-Quatrefoil (Blackburn and Keynes 1998: nos 2–4). The four coins are almost certainly of the same type as a very poorly preserved example found during excavations in Southampton in 1949 (Appendix 1 no. 4). Owing to its condition, Blackburn and Keynes (1998: 133) were unable to conclude whether this coin was a Cross-and-Lozenge variant or muled with another issue, perhaps the Two Emperors or Portrait-Quatrefoil. The new evidence provided by the Watlington Hoard shows these coins to have an overall bust style closest to the standard Cross-and-Lozenge types supporting a view that they are a variant of this. In this light the Southampton coin, although poorly preserved, belongs with this group and is especially similar to **cat. 2.69** with its curving eyebrow and straight nose.

The spelling of Alfred, **ÆLFRED**, brings the 'Transitional' Style within the remits of the mainstream Cross-and-Lozenge series, especially in the London Style (**cat. 2.117**, **2.123–26**, **2.130–31**, **2.134–37**, **2.149**, **2.154–55**, **2.157**) and Winchester Style (**cat. 2.169–79**, except **2.172**). It differs from the Two Emperors spelling of **AELFRED** further supporting this as a variant issue rather than a muled coinage. In all cases the inscription begins at the shoulder, a rare but known occurrence on the Cross-and-Lozenge coinage, the full inscription reading **ÆLFRED REX SAX.** As discussed above in relation to the Two Emperors it is unclear whether the final letter should be considered an 'X' or a cross. The lettering is large and neat, and there is use of a distinctive 'A' on all obverse dies in the word **SAX** (Figure 5.5), although a standard 'A' is used on two of the four reverses (**cat. 2.79**, **2.71**). The inner circle cut by the bust is formed of pellets on one coin (**cat. 2.70**), and plain on three coins (**cat. 2.69**, **2.71–72**). The ends of the circle end in pellets on **cat. 2.69** as seen on some of Alfred's Mercian-style Lunettes (Lyons and Mackay 2008: 49, pl. I nos 30–31).

Figure 5.5. Distinctive letter 'A' seen on Cross-and-Lozenge coins in the 'Transitional' Style. Top: cat. 2.69, 2.70*; bottom:* cat. 2.71, 2.72.

The drapery style is simple, consistent across the four examples, the only variation being a double-lined neckline on **cat. 2.72** and pellets on the vertical decoration within the drapery design on **cat. 2.69**, **2.71–72**. The portraits are broadly similar although all following the general Lunettes-type design of Alfred with neatly rendered hair and eyes; **cat. 2.69–70** have hair ending in pellets as seen on some of Burgred's Mercian Lunettes (cf. Lyons and Mackay 2008: pl. 1, no. 9). A long, double-stranded diadem extending well behind the back of the head with hair along its entire length on top is seen in **cat. 2.69**, **2.71–72**, again harking back to that seen across much of the Lunettes series, although the shape of the face with its prominent and well-rendered jawline sets them apart from these earlier coins.

The reverse is a simple Cross-and-Lozenge style, little embellished with other motifs (Figure 5.6). **Cat. 2.69–70** show this simple reverse with a straight-sided central lozenge enclosing a cross and plain cross ends ending in a pellet just inside the inner circle. Coins **2.71–72** can be placed within the remits of the classic Cross-and-Lozenge reverse with gently incurved sides on the lozenge, this time enclosing a saltire, the cross arms composed of pellets.

Each coin was struck by a different moneyer (Table 5.1). Two, Cenred (**cat. 2.69**) and Eanred (**cat. 2.70**) are likely from London based on other evidence, the former producing Two Emperors type pennies (Blackburn and Keynes 1998: no. 5) and Cross-and-Lozenge type pennies in the London Style (**cat. 2.106**; see below), while the other two coins were struck by moneyers linked with Canterbury, Ethelred (**cat. 2.71**) producing Canterbury-Style Cross-and-Lozenge type pennies (**cat. 2.86**) albeit stylistically quite crude, and Heahstan (**cat. 2.72**) who has Cross-

and-Lozenge type coins in the Canterbury (**cat. 2.89**) and Winchester Styles (**cat. 2.174–75**). Ethelred is also known to have produced late Mercian-style Lunettes at London belonging to Mackay's (2015: 127) Phase III (868/70–74).

Summary

The small number of coins assigned to this 'Transitional' style of the Cross-and-Lozenge coinage are an important addition to the corpus. The Lunettes type bust design, inner circle and inscription beginning from the shoulder all point towards these coins belonging very early in the sequence. Given the links to Alfred's reform types and the Lunettes influence they are here considered a 'transitional' type placed at the beginning of the Cross-and-Lozenge series. The overall evidence of the die-cutting style and the moneyers suggests that they may be the earliest phase from London, and there are some connections to the mainstream London Style in the face shape, especially in the form of the nose and eyebrow.

Canterbury Style (Figures 5.7–5.12)

Thirty-five pennies in the Watlington hoard have been attributed to the Canterbury Style (**cat. 2.1–2**; **2.73–103**; CLo1–2, 46–68; CLr1–2, 48–73) struck using 23 obverse and 26 reverse dies for Alfred, and two obverse and reverse dies for Archbishop Æthelred. Three pennies of Alfred are die-linked to previously known coins (**cat. 2.78** to Appendix 1 no. 7; **cat. 2.88** to Appendix 1 no 10 and **cat. 2.93** to Appendix 1 no. 12). A total of 13 moneyers are represented (Table 5.1), 11 for Alfred, and 3 for Archbishop Æthelred including one (Torhtmund) striking for both (**cat. 2.98–101**; Appendix 1 no. 18). A number of moneyers in the Watlington Hoard were not known previously for this type.

Figure 5.6. The Cross-and-Lozenge coinage: 'Transitional' style reverses. Top: cat. 2.69, 2.70*; bottom:* cat. 2.71, 2.72. *Scale 2:1.*

Table 5.1. Moneyers of the Two Emperors and Cross-and-Lozenge coinages. The names of moneyers listed in italics are not represented in the Watlington Hoard.

Type	***Style/mint***	***Moneyers for Alfred the Great***	***Moneyers for Ceolwulf II***	***Moneyers for Archbishop Æthelred***
Two Emperors	*London*	Beagstan *Cenred* Dudecil Eadulf Eanred Heawulf	Beagstan Cuthberht *Dealing* *Ealdwulf* Hereferth	
Cross-and-Lozenge	*Transitional (London?)*	Cenred Eanred Ethelred Heahstan		
	Canterbury	Biarnred Burgnoth Diarmund Eadulf Ethelgar Ethelred Guthhere Heahstan Tirwald Torhtmund Wibearht		Ethelmund Ethelwulf *Torhtmund*
	London	Bernulf Burgwald Cenred Ciolwulf Cynelm Dealing Eadulf *Ealdulf?(lead piece)* Ecgulf Ethelstan Herebald Heawulf Hereferth Liafwald Ludig	Beagstan Berneah Biarnred Burgnoth Ciolwulf *Cuthulf* *Dealing* Dudecil Eadulf *Eanred? (halfpenny)* Ecgulf Ethelstan? Liafwald *Oswulf*	
	Winchester	Burgred Dunna Eadelm *Ethlem...* Heahstan Luceman Wulfred	*Dunna*	
	'West Mercian'	Eacceh? Dudecil Ec[ ] Ethelred Hea[ ] Lulla Regingild Wibearht		

Figure 5.7. The Cross-and-Lozenge coinage: Canterbury Style A obverses. Alfred the Great: cat. 2.73 *(left),* cat. 2.76. *(middle). Archbishop Æthelred of Canterbury:* cat. 2.1 *(right). Scale 2:1.*

Blackburn and Keynes (1998: 134–37) divided their Canterbury Style corpus into two groups — 'Style A' and 'Style B' — plus one coin (Appendix 1 no. 15) considered to be a Style A/B mule. Recognised as the work of different die cutters, Style B shows 'greater variation than Style A' but owing to low numbers of finds it was 'difficult to determine the sequence of [Style B] dies' (Blackburn and Keynes 1998: 135). The large increase in the corpus of Canterbury Style coins, with 31 coins from the Watlington Hoard, brings greater clarity to their classification which can be considered as follows.

Canterbury Style A

Canterbury Style A (Figure 5.7) as described by Blackburn and Keynes (1998: 134) remains robust. The obverse exhibits a neat bust in styles influenced by the earlier Lunettes or Portrait-Quatrefoil types. The portrait is clear and simple with a large almond-shaped eye, an eyebrow/nose looping around it to meet the diadem, which is long (either single or double stranded) and in some cases protrudes at an angle from the neck (**cat. 2.73–77**, **2.89**). Drapery is simple, the armour depicted without perspective with the exception of one coin (**cat. 2.80**, Diarmund; Figure 5.8) for which the Roman-style cuirassed armour is very neatly copied from the original. The Style A coins in the Watlington Hoard, however, lack the very straight, near vertical diadem seen previously on Style A coins such as Appendix 1 nos 5, 14–15, and 18 rather having angled diadems as seen on Appendix 1 nos 7 and 11.

Figure 5.8. A unique Canterbury Style A Roman-style obverse bust of Alfred the Great for the moneyer Diarmund (cat. 2.80)*. Scale 2:1.*

The inscription for Alfred reads (+ᗅ)ELFRED REX or slight variation thereof (Figure 5.7). Five coins from Watlington (**cat. 2.73–77**, two dies) have the inscription ELFRED REX(+) starting from the shoulder rather than above the head. The evidence from the Two Emperors and Portrait-Quatrefoil alongside that for the Transitional Style suggest they should be placed at the head of the series. The coinage of Archbishop Æthelred of Canterbury reads either (+)E-ÐELRED ᗅRCHIEPI¯ or (+)E-ÐERED ᗅRCHIEPI¯, the latter the spelling used on both examples in the Watlington Hoard (**cat. 2.1–2**; Figure 5.7).

Blackburn and Keynes (1998: 134) identified four reverse types linked to Style A coins, of which one, a 'true quatrefoil' type of Archbishop Æthelred (Appendix 1 no. 15), was considered a Style B reverse muled with a Style A obverse. The plain-armed reverse cross on this coin was at odds with the other three reverse types all of which have pellet cross arms extending from the lozenge, seen as a defining feature of Canterbury Style A. These four reverse types are all seen on the 13 coins from the Watlington Hoard attributed to Style A which are labelled as Reverses 1–4 in the catalogue (Figure 5.9).

Figure 5.9. The Cross-and-Lozenge coinage: Canterbury Style A reverses. Top row (from left): Reverse 1 (cat. 2.75); Reverse 2 (cat. 2.1). Bottom row (from left): Reverse 3 (cat. 2.78); Reverse 4 (cat. 2.80).

Reverse 1 has a plain double outer circle; Reverse 2 the same with the circles broken by crescents where the cross arms meet the edge; Reverse 3 has a plain single outer circle with crescents where the cross arms meet it; and Reverse 4, a design shared with Style B, is the 'true quatrefoil' type. Previously considered to be a Style B type only, **cat. 2.80** (moneyer Diarmund) is cut in Style A. The cross arms extending from the lozenge centre towards the quatrefoil are formed of pellets rather than plain lines, and these join curving outer lines to form the four conjoined lobes which together form the quatrefoil. The lettering styles on **cat. 2.80** are very similar on both obverse and reverse and appear to have been produced using the same punches. They are paralleled by that on other Style A coins. However, **cat. 2.80** itself is not easy to interpret. It shares many elements with other Style A portraits: the long diadem, neat hair, large almond-shaped eye and eyebrow meeting the diadem about halfway along but its well-rendered Roman-style drapery is unique (Figure 5.8).

In the Watlington Hoard, Reverses 2 and 3 are found combined with Style A obverses (**cat. 2.78, 2.81, 2.86, 2.89, 2.92**) and muled with die-linked Style B obverses (**cat. 2.90–91**, Tirwald). In the latter, the large, neat Style A lettering of the reverse dies is in contrast to the smaller lettering style of their obverse dies supporting the view that these are mules rather than reverse types for both Style A and Style B. Style A coins were produced for both Alfred and Archbishop **Æ**thelred, the former using all three reverse styles, the latter only reverse 1–2.

Canterbury Style B (Figure 5.10–11)

Canterbury Style B remained largely undefined by Blackburn and Keynes (1998: 134–35) owing to the low number of dies, with four obverse and five reverse dies at the time of publication in 1998 spread across just five coins (Appendix 1 nos 8–10, 13, 15), including a Style A/B mule (Appendix 1 no.15). Within this group there were three reverse styles and two distinct bust

Figure 5.10. The Cross-and-Lozenge coinage: Canterbury Style B obverses (left: cat. 2.88*; right:* cat. 2.90*). Scale 2:1.*

styles, one based on the earlier Portrait-Quatrefoil or Lunettes type coinages and another with a Roman-style bust (Appendix 1 no.13). The 20 coins in the Watlington Hoard which belong to Blackburn and Keynes's (1998) Style B form two distinct groups; these are now divided on the basis of variation in the bust style and reverse style and are classified under Style B and Style C.

The characteristic obverse of the revised Style B group (Figure 5.10; **cat. 2.79**, **2.87–88**, **2.90–91**) follows certain traits listed under Blackburn and Keynes's (1998: 134–35) original Style B criteria. The bust has a short, double diadem composed of either a plain lower line and pelleted upper line or two pellet lines, barely extending passed the back of the head. The eyebrow/nose joins the lower diadem line at its top end, forming a continuous curved line widening to end at the nose; the eye is small, formed from two small crescents enclosing a pellet and the mouth of two more small crescents. The chin is formed of a large shallow pellet and hair is visible above the diadem being formed again of small crescents, three examples of which have pellets at the end. The style of the drapery is similar to that seen in Style A, again showing the influence of earlier issues.

There are two reverse styles (Figure 5.11), the 'true quatrefoil' of Reverse 4 (**cat. 2.79–80**, **2.88**; Appendix 1 nos 9–10, 15), as described for Canterbury Style A, but with plain (rather than pellet-formed) cross arms extending from the lozenge, and Reverse 5 which has cross arms ending in a lis (**cat. 2.87**, **2.93**; Appendix 1 no.8), perhaps influenced by a rare late variety of Burgred's Lunettes type (reverse E; Mackay 2015: 112). It should be noted that Reverse 5 is also seen on a small number of London Style coins (see below for discussion).

*Figure 5.11. The Cross-and-Lozenge coinage: Canterbury Style B reverses. Left: Reverse 4 (*cat. 2.79*); right: Reverse 5 (*cat. 2.87*). Scale 2:1.*

Canterbury Style C

Figure 5.12.The Cross-and-Lozenge coinage: Canterbury Style C, Reverse 6. Top: Style Ci bust (cat. 2.94); bottom: Style Cii bust (cat. 2.100). Scale 2:1.

Previously seen only on a single coin (Appendix 1 no.13), the 14 coins in the Watlington Hoard assigned to Style C form the largest part of the hoard's Canterbury Style corpus (Figure 5.12). However, there are fewer moneyers in Style C than Style A and it is the most extensively die-linked Canterbury Style group. All coins share the same reverse design: the central lozenge encloses a saltire (except **cat. 2.99–100** where this is a cross) and plain cross arms extend to a beaded outer circle (except **cat. 2.82–84**). There are two bust styles, one based on the Lunettes-style drapery (Style Ci: **cat. 2.94**, **2.98**, **2.102–03**), the other with Roman-style drapery including a large annulet on the left shoulder (Style Cii: **cat. 2.82–85**, **2.95–97**, **2.99–101**). All share elements of their portrait design: a large, almond-shaped eye enclosing a pellet and hair behind and between the double-stranded diadem which extends roughly to the top of the neck, having more in common with Style A than Style B. The nose is formed from a large, pointed wedge, the bridge joining the eyebrow. Two die-cutting styles can be identified here: on some examples (**cat. 2.82–85**, **2.94–96**, **2.98**, **2.102–03**) the eyebrow joins the lower line of the diadem at its top end as in Style B, whereas the other examples (**cat. 2.97**, **2.99–101**) the eyebrow joins the lower line of the diadem about halfway along, as seen on Style A coins. It is unclear whether this is indicative of phases of production or different die cutters. The inscription is generally consistent — **ELFRED REX** — although **cat. 2.84–85** begins **ÆLFRED**.

Sequence

Blackburn and Keynes (1998: 134–35) noted that the two distinct styles present in their corpus likely represented the work of two die cutters but that sequencing the dies or styles was not possible. The Watlington Hoard provides significant new evidence for the Canterbury Style, and although overall coin and die numbers remain low, it may help in understanding their composition better.

A small group of Style A coins representing two obverse dies are important (**cat. 2.73–77**). Struck in the names of the moneyers Biarnred and Burgnoth, all have neat busts influenced by the Lunettes and Portrait-Quatrefoil type, combined with Reverse style 1. The style and orientation of lettering is also consistent across both dies for obverse and reverse. All obverse inscription begins at the shoulder rather than above the head. This has been seen on both the Two Emperors and 'Transitional' Style Cross-and-Lozenge type issues which appear to belong early in the post-Lunettes sequence; support may also come from later Lunettes types of Burgred and some of Alfred's variant V Lunettes although in both cases they were most likely

struck in London rather than Canterbury (Naismith 2017: table 11; Lyons and Mackay 2008: 49–50, 96–105). As such **cat. 2.73–77** are most likely the earliest in the Canterbury Style sequence.

The relationship between Style A and B remains uncertain but it does not seem unreasonable to consider them contemporary from the evidence provided by the muling seen in several examples (B/A mules: **cat. 2.90–91**; Appendix 1 no.15). Of note is that the two B/A mules in the Watlington Hoard share obverse dies which are linked to examples of Style A Reverses 2 and 3. The obverse die used combines in both cases with a reverse of the moneyer Tirwald, suggesting contemporaneity of dies for Style A and Style B.

The coins of Style C, while still cut in ways which links them to the coins of both Styles A and B, are cruder in portrait style and exhibit design traits that provide links to the broader corpus, including those attributed to the London and Winchester Styles. Most notable are the parallels in reverse design and the rendering of the obverse drapery, copying a Roman prototype (Style Cii) or, in some cases, the Lunettes type (Style Ci). There is no known muling with coins of Style A or Style B and it seems reasonable to suggest that it forms the last phase in the sequence of Canterbury Style production. It is also the largest Canterbury Style group in the Watlington Hoard but one including a largest number of die-linked coins and fewer moneyers than represented in other groups, for example Style A/2, perhaps again indicating that these were issued later in the Canterbury sequence, their prevalence in the Watlington Hoard owing to Styles A and B having been out of production for a longer period of time.

While Alfred struck in all of the Canterbury Styles, coins of Archbishop Æthelred are known only in Style A alongside which is one coin muled with a Style B4 reverse. No coins of Style C are known for the archbishop, although one of his moneyers, Torhtmund, strikes in this style for Alfred. Assuming the phasing of the Canterbury Style is correct and Style C is at the end of the sequence, this suggests that Archbishop Æthelred only issued coins in the early part of the Canterbury Style and subsequently some extremely rare examples of the later Two-Line coinage. It is possible that this reflects what appears to be difficult relations between the two men, highlighted in Pope John VIII's surviving response of 877/8 to a now-lost letter from Æthelred which seems to have accused Alfred of ignoring or impairing certain Canterbury's privileges (Whitelock 1996: 944–45, no. 222; Nelson 1986: 45–46). Could one of these lost privileges be the Archbishop's minting rights in Canterbury at this time?

Summary

The Canterbury Style coins in the Watlington Hoard cover the whole span of their production from a new style of early coins in Style A (**cat. 73–77**) to the latest phase of Roman-influenced busts in the newly-assigned Style C. The recognition that Blackburn and Keynes (1998: 134–35) Style B should be divided into two groups — Styles B and C — is an important conclusion and it is now clear that the Canterbury Style is made up from three sub-styles produced in two phases, Style C forming the later period of production within which die-cutting styles related to Styles A and B are also visible. The issues of Archbishop Æthelred are short-lived in comparison and do not last through the whole period of issue, possibly reflecting the documented problems in the relationship between him and Alfred.

London Style (Figures 5.13–5.20)

London Style pennies form the largest group of Cross-and-Lozenge coins in the Watlington Hoard with 65 examples for Alfred (**cat. 2.104–68**; obverse dies CLo69–Clo111; reverse dies CLr74–CLr125) and 53 for Ceolwulf II (**cat. 2.6–58**; obverse dies CLo3–Clo41; reverse dies CLr3–CLr43). Two coins of the latter (**cat. 2.13** and **2.16**) are outside of the mainstream London Style but are attributed to London on the basis of the moneyers named on the coins and the styles of those other coins struck by them (Table 5.1).

Blackburn and Keynes' (1998: 37–38, nos 20–41) discussion of the evolution of the London Style remains very useful. The Roman-style bust seen on most London Style coins in their corpus became increasingly stylised over time forming a series of types for which an outline sequence was produced. Although they did not elaborate in detail, they helpfully arranged their plates to reflect these changes in style. The sequence of bust changes was mirrored by a shift in reverse design on later coins from a cross within the central lozenge to a saltire. An important element of discussion of the London Style has been the relationship between the coins of Alfred and those of Ceolwulf II, especially in relation to their sequence of striking.

Blackburn (1998: 114–19) placed Ceolwulf II's coins at the end of the sequence after Alfred's coins were struck through an assessment of bust style and the spelling conventions used. Production was envisaged in two phases with neither ruler's issues from London contemporary with the other. However, in a later re-appraisal Blackburn (2003: 213, no. 34A; Appendix 1, no. 42) used evidence from a new find to revise these conclusions. Its use of CEOLVVLF rather than CIOLVVLF challenged the assumption that this spelling of Ceolwulf was particular to a mint place in West Mercia rather than London for his issues of the Two Emperors coinage. However Blackburn 34A, struck with a neat London Style bust and in the name of the prolific London moneyer Liafwald, provided evidence that the spelling CEOLVVLF was likely an early spelling used at London, later replaced by CIOLVVLF. This important interpretation brought Ceolwulf II's Two Emperors issues to London and the likely issue dates of Ceolwulf's Cross-and-Lozenge coins into line (at least in part) with Alfred's. The Watlington Hoard is important here too, with Blackburn 34A die-linked to Watlington **cat. 34**, and 17 other Cross-and-Lozenge coins use the CEOLVVLF spelling (**cat. 2.6**, **2.10**, **2.11**, **2.13**, **2.15**, **2.16**, **2.18**, **2.20**, **2.23**, **2.24**, **2.29**, **2.30**, **2.34**, **2.37**, **2.52**, **2.58**). The reverse of Blackburn 34A, with the ends of the cross arms ending in small hooks, either copies or influences some Canterbury Style coins (Reverse 5) and it probably represents 'an early experimental phase of London die cutting' (Blackburn 2003: 213). This reverse style is seen on Watlington Hoard coins **2.34** and **2.158**.

Another more recent find, a penny of Alfred struck by the moneyer Liafwald (Blackburn 2003: no. 59A; Appendix 1, no. 32), was produced in a style akin to Appendix 1 no.35 (a penny of the moneyer Eadulf) previously considered within Blackburn and Keynes's (1998: 146–48) unassigned 'other' styles. The new coin of Liafwald enabled Blackburn (2003: 217) to assign both coins to London as the work of a different die-cutter. Two coins in the Watlington Hoard were struck in this style for Ethelstan (**cat. 2.133**), and Liafwald (**cat. 2.158**) and a third (**cat. 2.157**, Liafwald) was cut with a very similar portrait but some variation in drapery. The spelling of Liafwald on this last coin as LIOBVⅦLD also varies from the main group, the use of B instead

Figure 5.13. The Cross-and-Lozenge coinage: London Style reverse types. Top row: Reverse type A (saltire): cat. 2.40 *(Ceolwulf II, moneyer: Liafwald),* cat. 2.106 *(Alfred, moneyer: Cenred). Middle row: Reverse type B (cross):* cat. 2.27 *(Ceolwulf II, moneyer: Ethelstan),* cat. 2.124 *(Alfred, moneyer: Dealing). Bottom row: Reverse type A1 (pellets in arms of saltire):* cat. 2.127 *(Alfred, moneyer: Ecgwulf); Reverse type A2 (pellets in arms of cross):* cat. 2.132 *(Alfred, moneyer: Ecgwulf). Scale 2:1.*

of F paralleling some Lunettes type coins of Alfred (Lyons and Mackay 2008) might suggest that this is an early die. A coin in a cruder but similar style for Ceolwulf II (**cat. 2.16**) by the moneyer Burgnoth appears to belong within this same style (see below London Style 6).

Many of the London Style coins in the Watlington Hoard can be placed within the bust groups described in Blackburn and Keynes (1998: 137–43). These, and some previously unknown groups, have been given a more formal footing here under London Styles 1–7 (see Figures 5.13–5.20). Most exhibit a Roman-style bust (groups 1–4); coins with a Lunettes-style bust are placed in group 5; those discussed above in the style assigned to London on the basis of Blackburn (2003: no. 59A) are placed in group 6; group 7 is represented by a single coin of Ceolwulf II for the moneyer Berneah (**cat. 2.13**) with a bust style reminiscent of Alfred's later London Monogram; the reverse of this coin is also a unique variant, with an inner circle of large pellets on the reverse outside of the lozenge.

The reverse of the London Style Cross-and-Lozenge type pennies (Figure 5.13) shows some variation, even in the small corpus studied by Blackburn and Keynes (1998: 137–43). General characteristics include the lack of an initial cross or mark in the reverse inscription and the general use of MONETA or an abbreviated form after the moneyer's name; a central saltire (Alfred) or cross (Ceolwulf II) and two or all of the cross arms formed of pellets. The evidence from the Watlington Hoard shows a more complex situation, although most examples do adhere to the previously listed variations, but one which may illustrate the shortcomings of the hoard's composition in relation to the representation of the overall issue. The use of a central cross or saltire is seen broadly across the issues of both rulers, although a cross is more commonly seen on Ceolwulf II's coinage than Alfred's, and the long cross arms tend to be formed of pellets only, with no examples seen with two plain arms, although a small number were composed of plain arms only (**cat. 2.10**, **2.138**, **2.158**, **2.165–67**). The lack of MONETA in the reverse inscription seen on two earlier coins — Appendix 1 no.24 (Hereferth) and Appendix 1 no.44 (Liafwald) — is repeated on 13 Watlington Hoard coins including two examples for Hereferth (**cat. 2.141**, **2.145**) and three for Liafwald (**cat. 2.29, 2.48**, **2.158**) joined by Beagstan (**cat. 2.6**, **2.9**), Berneah (**cat. 2.10**, **2.12**), Burgwald (**cat. 2.105**) and Ludig (**cat. 2.165–67**; two dies).

London Style 1

There are four varieties of London Style 1 differentiated by the design of the drapery, designated here as Styles 1a–d (Figure 5.14; Table 5.2–5.3). Styles 1a and 1b were seen in Blackburn and Kenyes's corpus (Appendix 1 nos 22, 26–27, 28–31) for Alfred only. On most coins of Style 1 the hair is neat, within a cap-like rounded shape on earlier coins (e.g. **cat. 2.109**) while on those with later, slightly more stylised busts the hair approximates to a rectangle (e.g. **cat. 2.160**). Styles 1a–d can be described as follows:

- Style 1a: a neat bust, drapery in three sections (two to left; one to right) between which is a space, sometimes containing decoration; an annulet usually seen on the right shoulder; the few missing this feature may be later examples within style 1a. A single coin of Ceolwulf II (Burgnoth: cat. 2.16) and five of Alfred (Ciolwulf: **cat. 2.117**; Herebald: **cat. 2.134–37**) have the obverse inscription starting at shoulder. For the coins of Ceolwulf II, the earlier spelling variant CEOLVVLF or CEOLVLF is predominant (see Table 5.3) indicating Style 1a started early in the series. There is some variation in spelling of Alfred as ÆLFRED, ÆLFRED, or ELFRED, the latter most common; some variation at the end of the inscription is seen listing Alfred

Figure 5.14. The Cross-and-Lozenge coinage: London obverses of Style 1. Top row: Style 1a (cat. 2.106)*, Style 1b* (cat. 2.124. *Bottom row: Style 1c* (cat. 2.27)*, Style 1d* (cat. 2.8)*. Scale 2:1.*

Table 5.2. Moneyers striking in the Cross-and-Lozenge London Style for Alfred the Great.

Style	***Obverse***	***Reverse A***	***Reverse B***
1 (not further defined)	Bernulf: 2.104	Bernulf: 2.104	
1a	Burgwald: 2.105 Cenred: 2.106 Ciolwulf: 2.107–14 (*d-l*), 2.115, 2.116, Dealing: 2.122 Eadulf: 2.126 Ecgulf: 2.127 Herebald: 2.134–5 (*sh*) Heawulf: 2.138–9 Hereferth: 2.140–3 Liafwald: 2.151–2 (*d-l*), 2.153, 2.154–5 (*d-l*) Ludig: 2.160–7 (*d-l*), 2.168	Burgwald: 2.105 Cenred: 2.106 Ciolwulf: 2.107–14 (*d-l*) Dealing: 2.122 Eadulf: 2.126 Ecgulf: 2.127 Herebald: 2.134–5 Hereferth: 2.140, 2.142–3 Liafwald: 2.153–7 Ludig: 2.160–2 (*d-l*), 2.163–4 (*d-l*), 2.165–7 (*d-l*), 2.168	Ciolwulf: 2.115, 2.116 Heawulf: 2.138–9 Hereferth: 2.141
1b	Dealing: 2.123–5 (*d-l*)		Dealing: 2.123–5
1c			
1d	Ciolwulf: 2.117 (*sh*)	Ciolwulf: 2.117	
2	Ciolwulf: 2.118 Ecgulf: 2.127, 2.128–9 (*d-l*) Hereferth: 2.144–5 (*d-l*), 2.146 Liafwald: 2.156	 Ecgulf: 2.127 Hereferth: 2.144–8 Liafwald: 2.156	Ciolwulf:2.118 Ecgulf: 2.128–9
3a	Ciolwulf: 2.119–20 (*d-l*) Ecgulf: 2.130–1 (*d-l*) Hereferth: 2.147	 Hereferth: 2.147	Ciolwulf: 2.119–20 (*d-l*) Ecgulf: 2.130–1 (*d-l*)
3b & 3c	Hereferth: 2.148–9	Hereferth: 2.148–9	
4a	Herebald: 2.136 (*sh*)	Herebald: 2.136	
4b	Herebald: 2.137 (*sh*) Liafwald: 2.157	Herebald: 2.137	 Liafwald: 2.159
5	Cynhelm: 2.121 Ecgulf: 2.132 Hereferth: 2.150	Cynhelm: 2.121 Hereferth: 2.150	 Ecgulf: 2.132
6	Ethelstan: 2.133 Liafwald: 2.158	Ethelstan: 2.133 Liafwald: 2.158	
7			
Uncertain (fragment)	Liafwald: 2.159		

Note: d-l = die-linked groups; sh = obverse inscription starts at shoulder.

Table 5.3. Moneyers striking in the Cross-and-Lozenge London Style for Alfred the Great.

Style	***Obverse***	***Reverse A***	***Reverse B***
1a	Beagstan: **6**, 7 Berneah: **10–1** (*d-l*) Burgnoth: **15** Eadulf: **24** Liafwald: **29–30** (*d-l?*), *31*, **34**, **37**, *38* Uncertain moneyer: **58**	Beagstan: 6 Berneah: 10, 11 Burgnoth: 15 Eadulf: 24 Liafwald: 29–30 (*d-l?*), 31, 34, 37 Uncertain moneyer: 58	Beagstan: 7 Liafwald: 38
1b	Berneah: 12 Dudecil: **18** Liafwald: 32	Berneah: 12 Liafwald: 32	 Dudecil: 18 (*d-l* 19)
1c	Biarnred: 14 Ecgulf: 26 Ethelstan: 27–8 (*d-l*; 28 rev gp uncertain)	Ecgulf: 26	Biarnred: 14 Ethelstan 27
1d	Beagstan: **8** (*d-l* 35–6) Liafwald: **35–6** (*d-l* & *d-l* 8)	Beagstan: 8 Liafwald: 35–6 (*d-l*)	
2	Dudecil: 19, **20** Liafwald: 39–44 (*d-l*), 45–6 (*d-l*), 47	Dudecil: 20 Liafwald: 39–44 (*d-l*)	Dudecil: 19 (*d-l* 18) Liafwald: 45–6 (*d-l*), 47
3a			
3b	Beagstan: 9 Dudecil: 21–2 (*d-l*)		Beagstan: 9 Dudecil: 21–2 (*d-l*)
3c	Liafwald: 48		Liafwald: 48
4a	Eadulf: 25 Liafwald: 49–51 (*d-l*), **52**		Eadulf: 25 Liafwald: : 49–51 (*d-l*), 52
4b	Liafwald: 53, 54–55 (*d-l*)		Liafwald: 53, 54, 55
5	Ciolwulf: 17 Dudecil: **23** Liafwald: 56	Dudecil: 23	Ciolwulf: 17 Liafwald: 56
6	Burgnoth: **16** (*sh*)		Burgnoth: 16
7	Berneah: **13**	Berneah: 13	
Uncertain	Liafwald: **33**, 57		

Note: d-l = die-linked groups; sh = obverse inscription starts at shoulder; numbers in red = **CEOLVVLF** spelling; in blue = **CILVVLF**; italics = uncertain spelling. All other spellings are **CIOLVVLF**.

variously as king of the Saxons, Mercians, and Saxons and Mercians, or simply as King Alfred (discussed further below).

- Style 1b: similar to Style 1a with an extra, narrow panel of drapery on the left. All examples have an annulet on the right shoulder. The bust is neat and well defined but is arguably a little cruder than 1a. It is unclear if a chronological division can be made on style alone. Style 1b includes three coins of Ceolwulf II, one using the **CEOLVVLF** spelling, and three of die-linked coins of Alfred. Three coins of Style 1b have the unusual inscription describing Alfred as the king of the Saxons and Mercians (**cat. 2.123–25**; see below).
- Style 1c: similar style to 1a and 1b although cruder with two panels of drapery either side. Examples only in the name of Ceolwulf II (**cat. 2.14, 2.26–28**), all with spelling as **CIOLVVLF**.
- Style 1d: related in style to 1a but in mirror image with one panel to the left and two to the right. The face is long and straight with a large wedge nose and neat cap of hair. For three coins of Ceolwulf II (**cat. 2.8, 2.35–36**) a single obverse die was used by two moneyers — the only occurrence of this in the Watlington Hoard — and the unique inscription **CILVVLF REX MI** (although **REX M¯** is seen occasionally in London Style 1b, 1c, 3c and 5), and it is likely that the '**I**' here is the same as '**¯**' on the other coins.

Within the London Style 1, one group of related coins are of interest (Figure 5.15). The inscriptions on three of these, a die-linked group of coins of Alfred ending **REX SM** are especially of note, its meaning most likely translating as 'Alfred, king of the Saxons and Mercians' (Dealing: **cat. 2.123–25**), joining a coin from Blackburn and Keynes's corpus (Appendix 1 no.27; Liafwald) with the same inscription. Blackburn (1998: 120) played down the significance of the wording suggesting that it 'may only reflect the political situation as viewed locally by one die-cutter in London' — in other words that the die cutter made an assumption as to Alfred's position — but this underplays the die cutter's position, working closely with moneyers whose own position, although in many ways apolitical, afforded some relationship with the king himself (Naismith 2012b: 132–54). Blackburn (1998: 120) concluded that the style of the coin made it one of 'Alfred's finest and earliest', thus dismissing its potential importance. However, these conclusions were based on his original phasing of the Cross-and-Lozenge type in which Ceolwulf II's coinage post-dated Alfred's, and marking the final part of London's output of this type (Blackburn 1998: 117); subsequent finds show conclusively that Alfred and Ceolwulf II were, in fact, both issuing concurrently (Blackburn 2003: 213; discussed above). The evidence provided by the Watlington Hoard is useful in the re-appraisal of this inscription.

Figure 5.15. Cross-and-Lozenge obverse dies with inscriptions proclaiming Alfred as 'king of the Saxons and Mercians' (left; cat. 2.124*) and 'king of the Mercians' (middle;* cat. 2.155*); right, a die of Ceolwulf II probably produced by the same die cutter (*cat. 2.35*). Scale 2:1.*

Alongside the obverse die used on Dealing's three coins (die CLo80; **cat. 2.123–25**) with the **REX SM** inscription, there are three further obverse dies cut in the same style: one by Liafwald for Alfred (die CLo105; **cat. 2.154–55**) reading **REX M** ('king of the Mercians'); one by Eadulf for Alfred (die CLo81; **cat 126**) reading **REX SAX**; and a third used by both Beagstan and Liafwald for Ceolwulf II (die CLo5; **cat. 2.8**, **2.35–36**) with the unique spelling of Ceolwulf as **CILVVLF**. Little can be ascertained regarding phasing from the moneyers, all of whom were known in the earlier Lunettes type coinage and only Liafwald did not strike the later Horizontal/Two-Line type coins (Lyons and Mackay 2008: 98; Mackay 2015; Blackburn 1998: table 2). Their style is interesting, however, and matches that seen previously on the two coins of Liafwald for Alfred (Appendix 1 nos 27 and 26); the latter's inscription ends **REX SI**, which they speculated may have been an abbreviated form of the **REX SM** seen on Appendix 1 no.27. The die used in **cat. 2.8**, **2.34–35** for Ceolwulf II ends **REX MI**, likely related to the **REX M¯** seen on other examples of Ceolwulf II's coinage in the Watlington Hoard (**cat. 2.14**, **2.16**, **2.26–28**, **2.32**). Coin 26 in Appendix 1 probably does, in fact, end in **REX SI**, a variation on **REX S¯**. It appears that for Alfred, the same die cutter listed him as king of the 'Saxons', 'Mercians' and 'Saxons and Mercians'

The style of the coins in this wider group have a neat, careful die cutting of both the head and drapery with a prominent nose and flat, pointed chin, neatly rounded hair and regular drapery based on a Roman prototype. It is, however, outside of the mainstream styles seen on the other coins in the Watlington Hoard and elsewhere of London Style 1, forming a quite distinct group with the unique inscriptions, flattened face and squared neck shape. Given this additional overall evidence from Watlington, there seems little to suggest that the coins have to be early in the sequence and their slightly odd style may place them more comfortably nearer to the end. Allied to this is that all of these coins are parts of die-linked groups in the hoard, albeit with only two moneyers across just three coins for Ceolwulf II suggesting that along with the other die-linked groups these represent coins struck later in the Cross-and-Lozenge series, minimally circulated after leaving the mint and remaining together as a group. If this is correct, it could place Alfred's **REX S**, **REX SM** and **REX M** coins at or towards the end of the issue, potentially across the period around Ceolwulf II's death or deposition *c.* 879. These inscriptions may or may not reflect the true situation at the time but nevertheless add interesting evidence to the people's perceptions of the political situation in the late 870s. Importantly, too, they may suggest that the Cross-and-Lozenge type continued to be produced at some point for Alfred only, perhaps after Ceolwulf II ceased to be king of Mercia (chronology is discussed further below).

Figure 5.16. The Cross-and-Lozenge coinage: London obverses of Style 2 (left: Ceolwulf II, cat. 2.19*; right: Alfred,* cat. 2.129*). Scale 2:1.*

Figure 5.17. The Cross-and-Lozenge coinage: London obverses of Style 3 (left: Alfred, cat. 2.149*; middle: Ceolwulf II,* cat. 2.9*; right: Ceolwulf II,* cat. 2.48*). Scale 2:1.*

London Style 2 (Figure 5.16; Tables 5.2 and 5.3)

Simplified drapery formed of two panels, one either side of a V-shaped central section, some of which contain a large Y-shaped motif is seen in Style 2. The overall portrait style is cruder than in Style 1 with hair straighter on top, a flat face with a nose, in most cases, thin and straight. One example (**cat. 2.20**, Dudecil) for Ceolwulf II is neater, with a thicker, curved nose/eyebrow and rounded hair cap and the earlier CEOLVVLF spelling. Ceolwulf II's coins are most common (11 examples, mostly Liafwald), with only seven examples for Alfred.

London Style 3 (Figure 5.17; Tables 5.2 and 5.3)

Two panels of drapery, one either side of a V-shaped central section, positioned asymmetrically, right over left or left over right. The main style (3a) is without an annulet, and two other coins with an asymmetric design — albeit variations on 3a — have an annulet on the right shoulder (3b). Ceolwulf II's coins are seen in Style 3a (**cat. 2.9**, **2.21–22**) while Alfred is represented by both Style 3a (**cat. 2.119–20**, **2.130–31**, **2.147**) and 3b (**cat. 2.148–49)**, suggesting the inclusion of the annulet was a deliberate identifier, perhaps relating to the sequencing of the coinage although this is unclear on current evidence. A variant (**cat. 2.48**, Liofwald), shares affinities with the Canterbury Style in its lettering and the lack of MONETA or abbreviation in the reverse inscription. It is included here owing to its asymmetrical design but could, equally, be considered a variant of Style 1, especially 1d (cf. **cat. 2.8**, **2.35–36**).

Figure 5.18. The Cross-and-Lozenge coinage: London obverses of Style 4 (left: cat. 2.25*; right:* cat. 2.55*). Scale 2:1.*

London Style 4 (Figure 5.18; Tables 5.2 and 5.3)

A three-quarter-turned bust with neat portrait including large eye and square eyebrow/nose. There is little drapery on the right, two simple, curving lines on Style 4a, to which an annulet and extra line are seen on 4b. Blackburn and Keynes (1998) placed these coins (Appendix 1 nos 48–49) towards the end of their sequence, in part because of their overall two-phase production — Ceolwulf's issues coming after Alfred's — but the generally neat quality of the bust and consistent rendering of the drapery cautions against seeing Style 4 as only a late type. The mainstream of London Style 4 was only produced for Ceolwulf II (**cat. 2.25** (Eadulf), **2.49–55** (Liafwald); the latter consisting of four different obverse dies, CLo35–38). All spell Ceolwulf beginning **CIOL** except one fragmentary coin (**cat. 2.52**) using the earlier spelling, **CEOLVVLF**, and it is arguably in a finer style than the other examples. This suggests that London Style 4 may have begun early in the Cross-and-Lozenge sequence, the slightly devolving nature of its form lasting well into overall period of production, the face with its square eyebrow/nose and large ear similar to some of Liafwald's London Style 2 coins (e.g. **cat. 2.45–46**) which may be from the same die cutter. Style 4 appears to be the work of a single die cutter, all but one of the known examples struck in the name of the moneyer Liafwald and the surface of the other coin, **cat. 2.25** (Eadulf; obverse die CLo20), is pitted and damaged especially across some of the letters suggesting that this may have been a well-used die. It is possible that, as with die CLo5 (**cat. 2.8** and **cat. 2.34–35**), it was shared between more than one moneyer. It would be of little surprise if a coin struck for Liafwald using die CLo20 were found.

Three coins of Alfred (**cat. 2.136–37** and **2.157**) have been placed within Style 4b although both are variations from the main style and may be later, more devolved examples and these may fit as well elsewhere, **2.136–37** within London Style 1a and the portraiture on **cat. 2.157** suggests that, on balance, it may sit as comfortably in Style 6 (below).

London Style 5 (Figure 5.19; Tables 5.2 and 5.3)

The defining feature of London Style 5 is the Lunettes-style drapery formed of three panels (two curving shoulders and a central panel) all adorned with horizontal and vertical lines. Five Watlington Hoard coins and one other (Ceolwulf II: **cat. 2.17**, **2.23;** Alfred: **cat. 2.121**, **2.132**, **2.150**, Appendix 1 no.25) belong firmly within this style, another, **cat. 2.56** (Ceolwulf II) is cruder but allied to it, albeit with drapery which might be considered to owe more to the Portrait-Quatrefoil type than the Lunettes. The portrait varies across the style, with Cynelm's (**cat. 2.121**) schematic portrait most closely associated with the Lunettes coinage, while **cat. 2.23** (Dudecil) and **cat. 2.132** (Ecgwulf) show similar styles with large nose/eyebrow and defined jawlines; **cat. 2.23** has a neater cap of hair and lacks the annulet on the shoulder seen on **cat. 2.132.** Important, perhaps, from a sequencing perspective, is the spelling used for the Ceolwulf coins. On **cat. 2.23** this is the early

Figure 5.19. The Cross-and-Lozenge coinage: London obverses of Style 5 (left: Ceolwulf II, cat. 2.23*; right: Alfred,* cat. 2.132*). Scale 2:1.*

variety, CEOLVVLF, supporting the evidence from the overall style, and the other two coins (**cat. 2.17** and **2.56**) use CIOLVVLF, matching their cruder, later style. **Cat. 2.17** is comparable in style also to Alfred's **cat. 2.150**, akin to Appendix 1 no.25 which Blackburn and Keynes (1998: plate 6–7) placed at the end of their sequence for the London Style.

London Style 6 (Figure 5.20; Tables 5.2 and 5.3)

The attribution of this group to London is discussed above with reference to Blackburn (2003). A very different die-cutting style to the standard London Style with a Lunettes-esque bust design, the five examples (Ceolwulf II: **cat. 2.16**; Alfred: **cat. 2.133**, **2.158,** Appendix 1 nos 32 and 35) form a coherent group. The portrait has a high, looping eyebrow/nose, straight pellet diadem, and straight hair above ending in pellets. A few curls of hair are present in front of the diadem above the eyebrow. The eye is a large annulet (round or almond-shaped) enclosing a pellet, below which is a wedge mouth. **Cat. 2.133** and **2.158** and Appendix 1 no.32 have a defined neck and chin. The drapery is composed of two ladder-like bands on either side of the bust with decoration between, or slight variation. On all of the coins of Alfred there is a central annulet above V-shaped drapery design with linear decoration. **Cat. 2.16** (moneyer Burgnoth) is similar, albeit the central panel contains an X-shaped decoration paralleled by Appendix 1 no.37 (moneyer Cuthulf). The obverse inscription is consistent on all coins; +CEOLVVLF REX M(¯) starting at the shoulder for Ceolwulf II, +ELFRED REX ZA(I) starting above the head for Alfred.

It is important to note that the similarities between London Style 6 and group of unassigned coins (based around the issues of the moneyer Lulla) which may come from western Mercia (see below), especially in the use of ladder-like Lunettes-influenced side panels depicting drapery. However, the overall bust and portrait style is sufficiently different to consider that they belong to a different issue. It is possible that they used the same die cutter or that one style influenced the other, probably the London Style coins on the Lulla group given the variation seen in the latter. The placing of **cat. 2.16** is harder, however, given that it exhibits greater similarity to the potentially western group. For example in the looping crescent-and-wedge eyebrow (as seen on **cat. 2.180**, **2.185–87**), its overall design is very similar to **cat. 2.187**, as is Appendix 1 no.37, the other coin of Ceolwulf II in this style, previously considered a potentially West Mercian

Figure 5.20. The Cross-and-Lozenge coinage: London obverses in Style 6 (left: Ceolwulf II, cat. 2.16*; middle: Alfred,* cat. 2.133*; right: Alfred,* cat. 2.158*). Scale 2:1.*

coin in part on the moneyer's striking of the later Two-Line coinage in a 'West Mercian' style (Blackburn and Keynes 1998: 148). However, **cat. 2.16** was struck by Burgnoth, a moneyer who struck in the substantive London Style 1a (**cat. 2.15**) and for Alfred in the Canterbury Style (**cat. 2.75–77**), and it is hard to be certain where this coin belongs. On present evidence, this coin and Appendix 1 no.37 are considered products of the London Style, although future finds may help to define their origins more clearly.

Figure 5.21. The Cross-and-Lozenge coinage: London Style 7 (cat. 2.13)*. Scale 2:1.*

London Style 7 (Figure 5.21; Tables 5.2 and 5.3)

A single coin (**cat. 2.13**) of Ceolwulf II is in a style unlike any other Cross-and-Lozenge pennies either in the Watlington Hoard or the broader corpus. The obverse has a neat Roman-style portrait with large pellet diadem, a neat cap of hair, large almond-shaped eye and pointed nose, a defined chin and wide neck, elements of which can perhaps be traced back to the Two Emperors issues (e.g. **cat. 2.4**, **2.61**, **2.64**) and there is some affinity to the later London Monogram style. The drapery is unlike any other Cross-and-Lozenge coin including a large fan-shaped central panel and the outer drapery held together by a large annulet brooch on the shoulder. The reverse too is a variant type showing a pellet inner circle outside the lozenge centre. The coin (**cat. 2.13**) is one of four coins for Ceolwulf II from the moneyer Berneah (**cat. 2.10–13**), of which **cat. 2.10**, **2.11** and **2.13** have the CEOLVVLF spelling (for **cat. 2.13** this is inferred from a partial letter; **cat. 2.10–11** are die-linked), with the inscription starting above the head. This spelling combined with the early portrait style suggests that it may belong near to the head of the London Style sequence for Ceolwulf II. The other three coins of Berneah are all in the typical London style group 1a (**cat. 2.10/11**), or 1b (**cat. 2.12**) lending support to placing this coin within the London Style rather than leaving it unassigned.

A Cross-and-Lozenge type halfpenny

Alongside the corpus of pennies of Cross-and-Lozenge type a single halfpenny is also known, found at Pitstone (Buckinghamshire; PAS BUC-08EE42; illustrated in Figure 9.4). In the name of Ceolwulf II, the coin survives substantially complete albeit missing two parts of the outer edge. The result of this incompleteness is that it is unclear whether the spelling of the king's name is CEOLVVLF or CIOLVVLF; the moneyer also only partially survives, reading EA N[ ] and probably representing the moneyer Eanred, known for striking the Two Emperors type and the Transitional Cross-and-Lozenge type for Alfred. As such, it is likely that the halfpenny of Ceolwulf II belongs to the London Style although the bust's drapery is simplified compared to the known styles of the pennies, akin perhaps to the Portrait-Quatrefoil type or a simplified London Style 2.

Sequence

As outlined at the start of this section, Blackburn and Keynes (1998: 137–38; plates 2–3) emphasised the comparative quality of the Roman-style bust on London Style coins to the postulated Roman prototype to aid in the sequencing of the coins in their corpus. This was conditioned by both their phasing of production and the Roman-style bust being the only type then known in the London series (see above).

Coins in the Watlington Hoard of the Lunettes-influenced 'Transitional Style' (see above), attributed here to London, suggest that this design type (plus the neat Lunettes-influenced London Style 5) heads the London series. The Roman-style busts may begin later although the use of the spelling of Ceolwulf as both **CEOLVVLF** and **CIOLVVLF** on the Lunettes and Roman-influenced coins hints at the complexities in the London Style (cf. Canterbury Style C (see above, this chapter) where I see Roman-style busts as the last phase of production alongside some later, devolved Lunettes-style busts). Certainly Ceolwulf II's **CEOLVVLF** coins include some coins in excellent style (e.g. **cat. 2.10–11**: Style 1a) and some a little cruder (e.g. **cat. 2.6**, **2.18**: Style 1a, 1b); **cat. 2.18** also includes the ladder-like side drapery seen on London Style 6 which is mirrored in the unassigned, possibly West Mercian, styles (see below). This sits between the Lunettes and Roman-style bust types, probably influenced by both, and is difficult to place within the sequence. Its odd, somewhat crude style and similarity to both the unassigned issues, as well as the later coin from the Gloucester mint (Blackburn and Keynes 1998: pl. 11, coin S), may be enough to consider it later in the period of production.

Alfred's London Style coinage presents similar complexities and problems. Blackburn and Keynes's (1998: 139) sequencing placed coins early in the sequence with the inscription describing Alfred as 'king of the Mercians' but above (this chapter) I have argued that these coins are outside of the mainstream London Style 1 and the oddities of the inscriptions place them later, possibly struck after Ceolwulf II's demise as king, carefully produced but nevertheless devolved, especially when compared to the neat busts of the mainstream style, e.g. **cat. 2.107–14** (moneyer: Ciolwulf). The largest group of Alfred's coins, Style 1a, vary in quality indicating that it represents a long-lived standard type and one produced by several die cutters. Styles 1c and 1d — the latter being equivalent to Blackburn and Keynes earliest style — by comparison look to be more devolved and can be considered as likely mostly belonging to the later stages of production. London Style 2 is again generally cruder, the face style of some examples similar to those of Style 1d with its pronounced and squared eyebrow/nose, large ear and flat chin (e.g. **cat. 2.129**; although cf. **cat. 2.20** for Ceolwulf using the early spelling). London Style 3 is similarly crude, the neat cap of hair on early coins replaced with straight flat-topped hair and often similar facial features to those of Style 2.

The overall evidence for the London Style would suggest that the coins influenced by the Lunettes type are generally earliest, Style 1a long-lived from near to the beginning of the series and lasting throughout Cross-and-Lozenge production. This influences the production of other Roman-style busts of Styles 1b-d, 2 and 3. London Style 4 is hard to place, although probably introduced early with all dies neat and well cut, and the work of a single die cutter. Styles 6 and 7 were probably among the latest types produced.

Summary

The large corpus of London Style coins in the Watlington Hoard, struck for both Alfred and Ceolwulf II, has gone a long way in helping to untangle the complexities of this type, making sense of the series and highlighting its diversity by extending the range of sub-styles known. Blackburn and Keynes (1998) outline has been assessed and formalised into seven sub-styles. The number of Lunettes-influenced examples in the hoard shows that while these were a minor element of the London Style, they nevertheless formed an important part of production and it is reasonable to consider them to be among the earliest phase of minting, before most of the Roman-style busts. The wide-ranging design in Style 1 coins would suggest that it was long-lived, though, and also probably started early. The evidence from the Watlington Hoard has also challenged the sequencing of the London Style coinage as previously outlined (Blackburn and Keynes 1998: 137–38; plates 2–3), and has consolidated the evidence that Ceolwulf and Alfred issued concurrently even if it appears likely that Alfred's production outlived Ceolwulf's, and possibly Ceolwulf II himself, with a number of late phase coins announcing Alfred as 'King of the Mercians'.

The Winchester Style (Figure 5.22)

The Winchester Style is poorly represented in the Watlington Hoard (**cat. 2.169–79**; obverse dies CLo112–Clo121; reverse dies CLr126–CLr135), just 11 examples and only a single new moneyer in addition to those known previously (**cat. 2.169–170**, Burgred; Table 5.1). Our understanding of the style can be little extended beyond that described by Blackburn and Keynes (1998: 143). It was assigned to Winchester through the moneyers Wulfred and Dunna, both known to have struck at the city's mint in the period post-dating the Cross-and-Lozenge up until the reign of **Æ**thelstan (924–36).

Figure 5.22. The Cross-and-Lozenge coinage: examples of coins in the Winchester Style from the Watlington Hoard. Left: cat. 2.171 *(moneyer: Dunna; reverse type 2); middle:* cat. 2.175 *(moneyer: Heahstan; reverse type 3; right:* cat. 2.179 *(moneyer: Wulfred; reverse type 2). Scale 2:1.*

Blackburn and Keynes (1998: 143) identified a series of changes within the Winchester Style allowing for the coins to be placed into a general sequence. The bust style was initially a faithful reproduction of the Roman portrait with well-defined annulet brooches and long diadem ties which became increasingly stylised over time. The reverse is a simple lozenge enclosing a saltire with cross arms extending to the outer edge; Blackburn and Keynes identified three reverse variants (Figure 5.22) which could be matched with the steadily devolved bust: the earliest type has two cross arms formed pellets and two plain (type 1), followed by a variant with four pellets arms (type 2); the final type has four plain cross arms (type 3). Other motifs, such as pellets or trefoils composed of pellets are seen outside of the lozenge on a some examples (pellets: **cat. 2.174–77**; trefoil of pellets: **cat. 2.171, 2.179**). The reverse inscription does not start with an initial cross and MONETA is included in full, except on **cat. 2.176–77** (Luceman) where it is abbreviated. The obverse inscription reads +ÆLFRED REX (S/SA/SAX/A), only the last of which, ending A, is a new variant. The lack of early reverse types in the Watlington Hoard is discussed below (Naylor, Chapter 6). One Winchester Style coin of note is **cat. 2.172** (Dunna). This is not struck in the main style but is based on the Canterbury Style with a Style A-related obverse (cf. **cat. 2.86**, Ethelred) and Style 2 reverse, although in this case MONETA is included in full whereas it is not included in the mainstream Canterbury Style.

Summary

The Winchester Style coins in the Watlington Hoard add little to our understanding of the type, all examples appearing to belong to its later phases of production, and the hoard has added only a single new moneyer to the type. The most important and interesting development from the Watlington coins is the link evident in the die-cutting styles between a well-known Winchester Style moneyer, Dunna, and the Canterbury Style with a coin in his name (**cat. 2.172**) akin to Canterbury Style A highlighting the connections and complexities in the Cross-and-Lozenge series overall.

Unassigned 'Other' styles: possible West Mercian groups (Figures 5.23–5.25)

As with the broader corpus (Appendix 1 nos 65–71), a number of coins within the Watlington Hoard (**cat. 2.180–90**; Table 5.1) do not conform to the three main styles. Some of these coins, encompassing several moneyers, share enough attributes to suggest another style grouping, albeit rather broad; others are harder to place.

*Figure 5.23. The Cross-and-Lozenge coinage: West Mercian 'Lulla' group. Penny of the moneyer Lulla (*cat. 2.185*). Scale 2:1.*

Three coins of the moneyer Lulla (**cat. 2.185–87**; Figure 5.23) add to the existing corpus of four coins (Appendix 1 nos 65–68). All but one of these older finds (Appendix 1 no.67) are in a different style based more firmly on the Roman prototype (Blackburn and Keynes 1998: 146). These are in a style in some ways akin to the Winchester Style, especially given the more varied busts seen in the Watlington Hoard from Winchester moneyers. Their widespread

findspots (see Appendix 1) include the Cuerdale Hoard and a stray find from Bawsey (Norfolk) but two of these finds also come from excavations within the city of Winchester. This lends some support to the proposition to Lulla perhaps using Winchester-cut dies although too few coins are currently known to be sure. Appendix 1 no.67 survives as a fragment with only the top of the head (eyebrow/nose, eye and hair) remaining, and the inscription starts above the head rather than at the shoulder. These details have affinities with the Watlington coins, all of which are complete. Two share obverse dies (**cat. 2.185–86**), and like Appendix 1 no.67 have a high curving eyebrow and nose, enclosing an annulet and pellet eye (although this is rounder than the earlier find) with a wedge mouth and crescent ear partially covered by the straight plain diadem along the outer line of which are small hairs. The inscription **+ÆLFRED REX** starts above the head, matching (what can be seen of) Appendix 1 no.67. The drapery on **cat. 2.185–86** is somewhat idiosyncratic compared to the main styles with a large central annulet gathering two ladder-like pieces of drapery from left and right, between which are lines and pellet decoration, although these share a broad style with London Style 6 and with a Two Emperors type of Ceolwulf II (**cat. 2.5**). The reverse is a typical Cross-and-Lozenge type design with plain cross arms, the inscription including **MONETA** in full, one with a central cross (**cat. 2.185**), the other a central saltire (**cat. 2.186**). The other coin of Lulla (**cat. 2.187**) is corroded, the design not wholly visible. The portrait also has a high curving eyebrow and straight nose, the hair outside the diadem ending in pellets, as in Canterbury Style B. The drapery shares the ladder-like side elements, although the central panel is closer to the Roman original. There is a probable annulet below the head but this is partially under corrosion and cannot be determined definitively. The inscription is closer to the previously known coins reading **+ÆLFRED REX ZA** from the left shoulder.

*Figure 5.24. The Cross-and-Lozenge coinage: West Mercian 'Lulla' group. Pennies of the moneyers Eaccah? (*cat. 2.180*), Ethelred (*cat. 2.183*) and Hea[...] (*cat. 2.185*). Scale 2:1.*

Four other coins (**cat. 2.180–84**; Figure 5.24) are in a cruder, but related style with similar ladder-like side drapery, and the large central annulet on all but **cat. 2.180**. The portrait on **cat. 2.180–82** is again related to the Lulla coins with their high curving eyebrow/nose and a round pellet eye; that on **cat. 2.183** a devolved version of the other Lulla coins or the Winchester Style, and **cat. 2.184** is small and ill-defined with square nose, pellet eye and ear covering part of a long, plain diadem. The inscription starts above the head (except **cat. 2.184**) and is a variation of +ÆLFRED (or ÆLFRED) REX (ZÆ), except for **cat. 2.180** which is somewhat blundered and may read +ÆER DRE or +ÆLFR DRE depending upon the interpretation of what may be an '**E**' or '**LF**' if the '**F**' is small and tucked into the '**L**'. Regardless, all of these coins share traits with those of Lulla and while it is possible that their crude style could be considered imitative, they also hang together loosely enough as a broad group, and one perhaps struck at a mint, maybe more than one, in western Mercia (discussed below).

There are three other coins (Figure 5.25) in the Watlington Hoard which are currently unassigned, one of the moneyer Regingild (**cat. 2.188**) and two for the moneyer Wibearht (**cat. 2.189–90**; see also **cat. 2.102–03** Canterbury Style). The former shares stylistic elements and broadly fits into a group with two previously known coins (Appendix 1 nos 69–70), especially its square nose and spiky hair. The drapery, like on Appendix 1 no.69, broadly follows the Roman original but is somewhat different in style, is in some ways related to the Winchester Style, but there are similarities to London Style coin **cat. 2.147** also. The inscription matches that seen previously — +ÆLFRED REX SAX — and also starts at the shoulder. The reverse inscription includes MONETA in full, and **cat. 2.188** shares a pellet cross initial mark with Appendix 1 no.70 and also has this at the end of the inscription. This pellet cross is paralleled on a Two Emperors penny of Ceolwulf II (**cat. 2.4**), a coin with a portrait style which shares features with this coin of Regingild.

Figure 5.25. The Cross-and-Lozenge coinage: possible West Mercian coins. Pennies of the moneyers Regingild (cat. 2.188) *and Wibearht* (cat. 2.189)*. Scale 2:1.*

The well-defined square neckline and drapery design is mirrored on two other coins struck by the moneyer Wibearht (**cat. 2.189–90**), with an annulet located just left of centre and lines of drapery running from it. **Cat. 2.189** is closest in style to those of Regingild in both drapery and portrait, **cat. 2.190** somewhat cruder, and its wedge-shaped nose closer to Canterbury Style C coins, to which the other Wibearht coins belong. In both cases, the obverse inscription starts above the head, **cat. 2.189** with the inscription +ELFRED REX Z, **cat. 2.190** lacking the final Z. The coins of Regingild and Wibearht appear similar enough in style to suggest that there may be some relationship in their die cutting. Whether they should be considered part of a broader style or shared mint place is harder to conclude given the variation outlined above but it is not unreasonable to suspect that this is the case.

The potential location of any mints outside of London, Canterbury and Winchester remains as difficult to solve now as it did when Blackburn and Keynes published their corpus in the late 1990s. They argued that the coins of Lulla (Appendix 1 nos 65–67), although in part produced in a style somewhat different to those in the Watlington Hoard — and broadly comparable to **cat. 2.188–90** — formed 'a distinct group on their own...probably operating on his own at a mint in western England – possible candidates include Bath, Exeter and Gloucester' (*ibid.*: 146). With this in mind a coin worth considering as a parallel for **cat. 2.185–87** (and perhaps **cat. 2.180–84**) was found in the Cuerdale hoard of *c.* 905 and was struck at Gloucester (Blackburn and Keynes 1998: pl. 11, coin S). This coin with its neat portrait including a high curving eyebrow/nose exhibits a remarkably similar shape to the drapery with its ladder-like side panels; the inscription contains a long-tailed R similar to **cat. 2.185–86** and the spelling of Alfred as **ÆLFRED**. Naismith (2017: 171) has noted that the influence of the Cross-and-Lozenge on this coin's overall design, and given the parallels in drapery style, it lends some support to the notion that Lulla, and some other moneyers, were striking coins at a mint in the west of England, possibly even at Gloucester. Another possibility is a mint located in southern Mercia, perhaps at Oxford as Blackburn (2003: 217) suggested for some/all of the Winchester Style and the stylistic links between some of these unattributed coins and the Winchester Style coins is apparent. Such a connection between Oxford and Winchester finds additional support from the evidence of later coinage. Metcalf's (1992: 85) study of Athelstan's Crown Bust series concluded that dies from the two cities were 'almost certainly by the same hand'; perhaps this reflects a long-standing association dating back into the 9th century. Unfortunately, stray finds are unhelpful in this respect with so few known (two coins of Lulla discovered during excavations within the city of Winchester, one of Regingild from Warwickshire and a Winchester Style coin of Luceman from Oxfordshire are the only known examples; Appendix 1: 61, 65, 68, 70). Taken on face value this is a somewhat contradictory distribution for different styles attributed to Winchester and 'Mercia', although it highlights the relationship between die-cutting centres and mint places and also the low levels of data available to us. The overall evidence from the unassigned styles, however, is greatly enhanced by the Watlington Hoard, strongly suggesting minting in south or west Mercia, perhaps in two distinct but broad styles, one consisting of a bust with drapery gathered to a central annulet, the other based on a Winchester Style Roman-influenced bust.

Summary

The difficulties of assessing the 'unassigned' styles of the Cross-and-Lozenge coinage remain but the Watlington Hoard has provided clear new evidence, extending the range of designs and also enabling some groupings to become apparent. In this, two broad styles are now apparent, one with ladder-like drapery gathered at the neck, the other with a Roman-bust influenced by the Winchester Style similar to that known previously. That these belong to mints other than Canterbury, London and Winchester is plausible and there is reason to tentatively assign Gloucester and Oxford as potential mint places, although the evidence overall is inconclusive.

Conclusion

To summarise, the numismatic significance of the Watlington Hoard lies in its size and composition, greatly increasing the corpus of Two Emperors and Cross-and-Lozenge coins available for study. This evidence is used here to further our numismatic understanding of these issues, their design and sequencing of production. The new die-cutting styles seen in the hoard for the Two Emperors (Style 3: **cat. 2.59–63**, **2.65–68**; Style 4: **cat 2.5**) shows it was a larger issue than previously realised, and important evidence for a Cross-and-Lozenge 'Transitional' style has been identified and may form part of the early London Style. Within the Cross-and-Lozenge coinage, the Watlington Hoard has had the most profound impact on the Canterbury Style and the previously ill-defined styles which were unassigned to any location but which now appear more securely attributed to a mint or mints in western or southern Mercia; these may have been struck on a larger-scale than expected on earlier evidence. The coins in the London Style and Winchester Style consolidate previous knowledge but the Watlington Hoard has significantly highlighted the diversity of the London Style and helped in understanding the sequencing of its coins, firmly bringing Ceolwulf II's issues in line with Alfred's Cross-and-Lozenge types. Given the complexities of the Cross-and-Lozenge type, it is hard to imagine that the entire series could fit comfortably within Lyons and Mackay's (2008: 64–5) squeezed chronology with production only beginning in late 877; a start date from around 875 now seems more certain, especially given the connections between the Two Emperors and Cross-and-Lozenge as well as the extended London minting with the 'Transitional' Style coins (see further discussion in Baker, Chapter 8). The main elements of the classification of the Two Emperors and Cross-and-Lozenge types produced in this chapter are summarised in Appendix 2.

Chapter 6

The coins of the Watlington Hoard

John Naylor
with a contribution by Simon Coupland

Coinage forms the largest part of the Watlington Hoard by number of objects and its composition provides unparalleled evidence for the coin issues of the late 870s (see Naylor, Chapter 5). This chapter discusses these coins primarily from the perspective of their deposition as a group of objects rather than their contribution to the broader numismatic literature, although inevitably it will inform on such issues (also see Naylor, Chapter 5 and Baker, Chapter 8). The focus here is the nature of the deposit, the variations within the corpus of the Styles discussed in the last chapter, and the manner in which the coinage in the hoard may have come together.

The contents of the hoard: general characteristics

A minimum of 203 silver coins were recovered: 201 pennies of Wessex, Mercia and the Archbishop of Canterbury plus two Carolingian deniers. This figure includes fragments which have identifying features such as aspects of the design or lettering but which could not be matched to any other coins (**cat. 2.191–92**, **2.194–201**). A number of very small fragments for which no such features survive were not included and it is possible that these may form parts of the chipped or fragmented coins. Full details and images of all coins can be found in Catalogue 2.

The coins are mostly whole or, if incomplete, only slightly chipped (for fuller discussion of the conservation of the objects in the hoard see Pearce (section 2.3) and Baldwin (section 2.4). Some fragmented coins have been re-assembled, and other fragments remain unassigned. The coins are mostly flat with no evidence that any have been bent, their surfaces are generally good although some have various damage. None of the coins exhibit the characteristic half- or new-moon shaped peck marks known from hoards of the later 9th or early 10th centuries supporting broader evidence that pecking was not a phenomenon seen during the period of the Viking Great Army's raiding and overwintering in the 860s and 870s (Graham-Campbell 2002: 58; Archibald 2011: 51, 54). The coins as a whole show very little wear and are well struck giving clear design and inscriptions.

The corpus of coins (Figure 6.1) contains silver pennies of Alfred the Great of Wessex (135 coins, **cat. 2.59–193**), Ceolwulf II of Mercia (56 coins, **cat. 2.3–58**), **Æ**thelred, Archbishop of Canterbury (2 coins, **cat. 2.1–2**), and silver deniers of the Carolingian Franks (2 coins, **cat. 2.202–03**; see Coupland below, this chapter). Alongside these are seven fragmentary coins for which the issuer is not discernible (**cat. 2.194–201**), at least four of which definitely belong to the Cross-and-Lozenge. Current scholarship dates the production of the Two Emperors

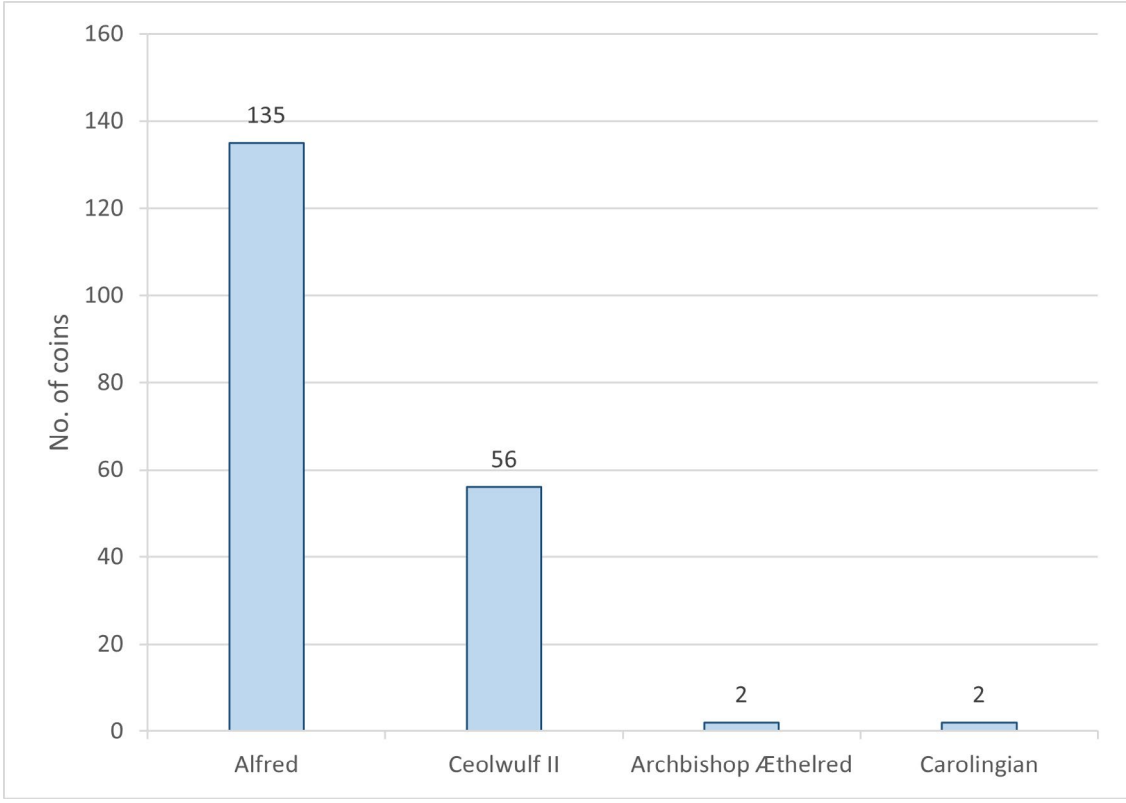


Figure 6.1. Coinage in the Watlington Hoard by issuer.

and Cross-and-Lozenge types to the period of Ceolwulf II's short reign (874–79?), with overall production likely to cover *c.* 875–79, Alfred's coins probably out-living Ceolwulf's (see Naylor, Chapter 5 and Baker, Chapter 8). The two Carolingian deniers also date to this period, the Horizontal/Two-Line penny introduced no earlier than *c.* 879.

The silver pennies are divided into three issues (Figure 6.2): the Two Emperors (**cat. 2.3–5**, **2.59–68**), Cross-and-Lozenge (**cat. 2.1–2**, **2.6–58**, **2.69-192**, **2.194–201**) and Horizontal/Two-Line types (**cat. 2.193**). The Two Emperors and Cross-and-Lozenge types were produced at the end of a period when the kings of Mercia and Wessex — sometimes alongside the Archbishop of Canterbury — issued coins using the same designs, suggesting a form of economic and political alliance between the two kingdoms (e.g. Naismith 2017: 159–63, 168–70). The Horizontal/Two-Line coinage was introduced under Alfred, its design also issued in the name of the Archbishop of Canterbury during his reign. It was heavily copied in the Danelaw. The Cross-and-Lozenge is the dominant type in the hoard, accounting for 186 of the 203 coins with 13 Two Emperors pennies the only other type present with more than two examples (Figure 6.3).

Figure 6.2. Examples of the designs of the Anglo-Saxon coinage in the Watlington hoard.
Top row: the Two Emperors type (left: Ceolwulf II, cat. 2.4*; right: Alfred,* cat. 2.66*).*
Middle row: the Cross-and-Lozenge type (left: Ceolwulf II, cat. 2.11*; right: Alfred,* cat. 108*).*
Bottom: the Horizontal/Two-Line type (Alfred: cat. 2.193*). Scale 2:1.*

The Two Emperors Type

Thirteen silver pennies of Two Emperors type represent a significant increase in the corpus for this type, with ten examples for Alfred and three for Ceolwulf II (Figure 6.2; **cat. 2.3–5, 2.59–68**). Five bust styles were identified in the last chapter, four of which are present in the Watlington Hoard (Figure 5.3): Style 1 is a refined Roman-style bust; Style 2 a devolved version of this; Style 3 an unexpected addition to these, influenced by earlier 9th-century coin design; and Style 4 a unique example with drapery drawn together into a central annulet brooch. Nine of Alfred's coins belong to Style 3, and one to Style 1; Ceolwulf II's are divided between two coins of Style 2 and one of Style 4. Only two coins of Alfred are die-linked (dies TEo11 and TEr11; **cat. 2.66–67**) and there are no die links to the previously published coins.

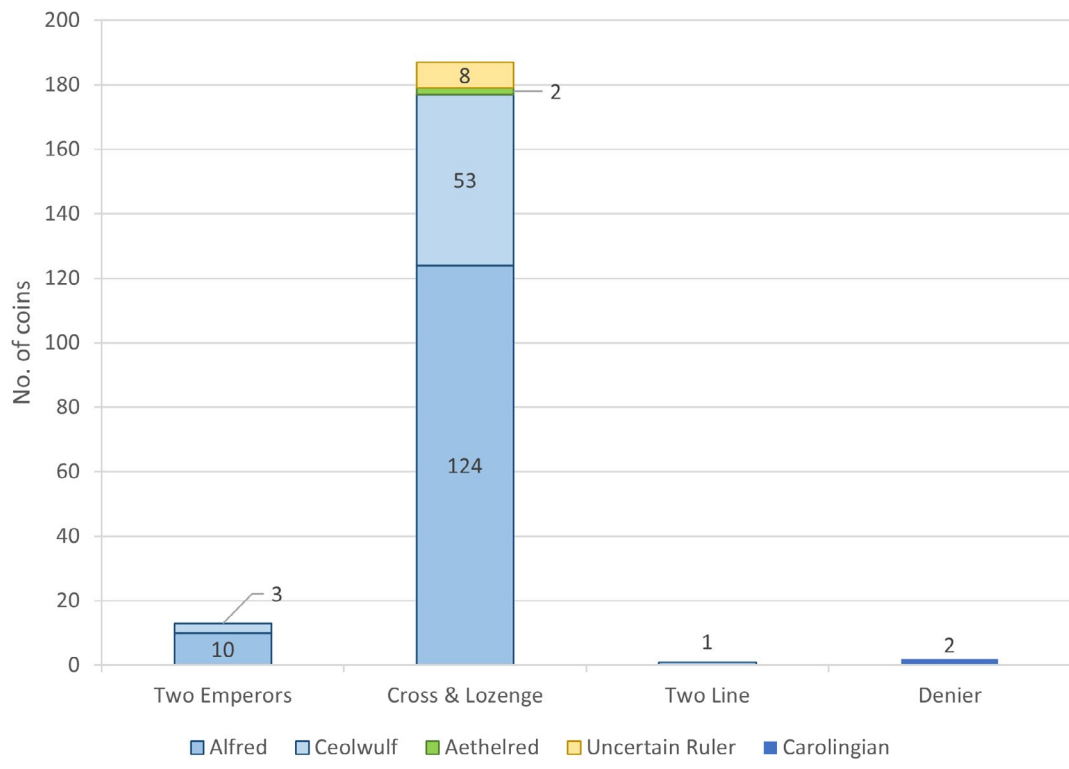


Figure 6.3. The contents of the Watlington hoard by issue and issuer.

Metrology

Nine of the thirteen Two Emperors pennies are complete, three are chipped (**cat. 2.3, 2.60** and **2.64**) and one fragmentary (**cat. 2.68**). The weight distribution of the complete pennies (Figure 6.4) shows that all weigh above 1.30g, the lightest **cat. 2.61** at 1.33g. The average weight is 1.395g with an overall range of 1.42–1.44g for Ceolwulf II, 1.33–1.46g for Alfred; seven of the ten coins weigh 1.35–1.44g, over half of which are above 1.40g. The two complete Style 2 Ceolwulf II pennies belong within this heavier group (1.40–1.44g; **cat. 2.4–5**) and there is no discernible difference in weights between Alfred and Ceolwulf II; the former's show wider variation, however, suggesting a weight standard of around 1.40g for these coins (possibly slightly higher depending upon the levels of leaching from the metal during their period of deposition). With this, the Two Emperors coins correlate well to the likely weight standard of around 1.40g seen throughout much of the period after Offa's reforms of 792/93 (Naismith 2012b: 178–80). The clustering of weights above 1.35g is substantially higher than that for the previously published examples (both at 1.30g) and although one of these, the coin of Alfred (Appendix 1 no.2), is chipped it is nevertheless light compared to the Watlington Hoard corpus. It is, perhaps, notable that the only Watlington Hoard example for Alfred in Roman bust Style 1 (**cat. 2.64**) is also lighter, weighting 1.31g, although it too is slightly chipped. The lighter weights of these pennies provide some support for the phasing of the Two Emperors proposed on stylistic grounds (Naylor, Chapter 5) and places them closer to the median weights seen for the London Style Cross-and-Lozenge type pennies (see below; Figures 6.10–11).

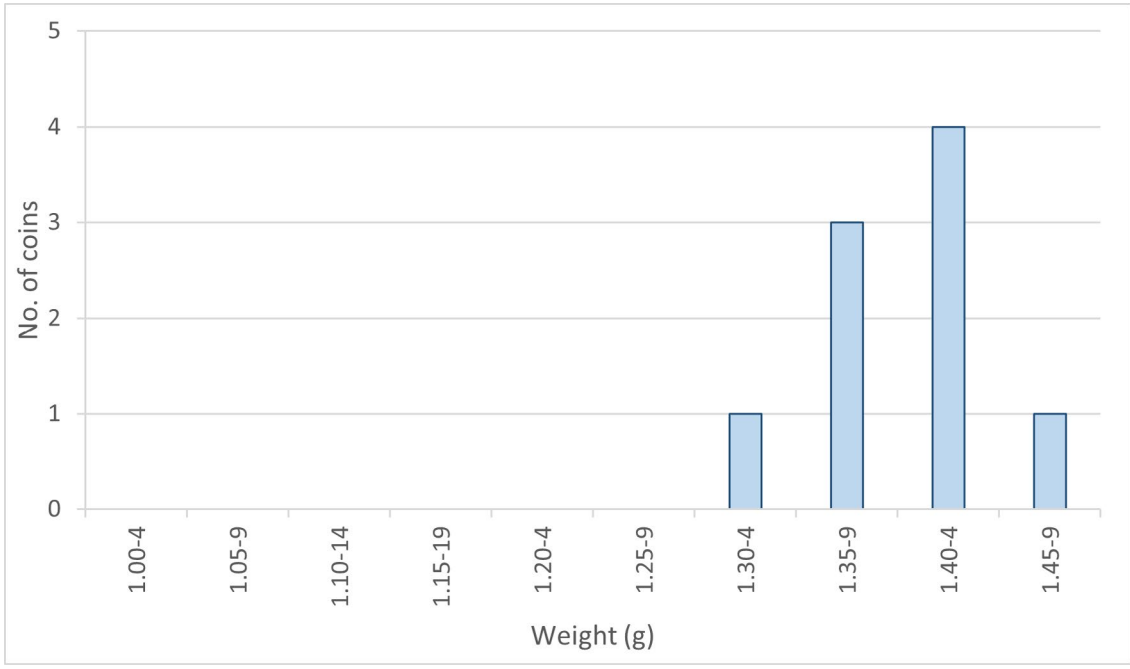


Figure 6.4. Weight distribution of the Two Emperors type silver pennies in the Watlington Hoard. Excludes chipped or fragmented coins.

Moneyers

Seven moneyers were used to produce the 13 Two Emperors pennies for Alfred and Ceolwulf II represented in the Watlington Hoard (Table 5.1), all in addition to Cenred (Alfred; Appendix 1 no.2), Ealdwulf (Ceolwulf II; Appendix 1 no.3) and Dealing (Ceolwulf II; near Leominster hoard) known from elsewhere. Beagstan is the only moneyer to appear on Two Emperors coins for both kings (**cat. 2.3, 2.59, 2.60**). All but one continue as moneyers in the Cross-and-Lozenge series (see below), with no coins of Cuthberht known; he struck late Mercian-style Lunettes type pennies for Burgred at London and Two-Line pennies in a 'West Mercian' style (Blackburn 1998: 109–10, table 2; Mackay 2015: 125–26; Naismith 2017: nos 1268–70). Future finds of Cross-and-Lozenge type coinage in his name should not be surprising. All of the moneyers of the Two Emperors type are known from the Lunettes type, having struck for Burgred, Æthelred I or Alfred, and all but Heawulf (Æthelred I and Alfred only) are listed London moneyers.

THE CROSS-AND-LOZENGE COINAGE

The 186 silver pennies of Cross-and-Lozenge type form the largest component of the Watlington Hoard. They have been catalogued using the revised system of classification discussed above (Naylor, Chapter 5), divided between a number of distinct die-cutting styles assigned to Canterbury, London and Winchester with two other groups possibly struck in West Mercia. The composition of the Cross-and-Lozenge corpus (Figure 6.5) is dominated by the London Style (118 coins: 53 Ceolwulf II, 65 Alfred) accounting for 63% of the total using 43 obverse and 50 reverse dies for Alfred, and 38 obverse and 40 reverse dies for Ceolwulf II. The Canterbury Style accounts for 33 coins (31 Alfred, 2 Archbishop Æthelred) with lower numbers of coins attributable to the Winchester Style and 'West Mercian' styles (11 and 13 coins, respectively); four coins belong to the 'Transitional' Style. Eight were too fragmented to assign to a particular style.

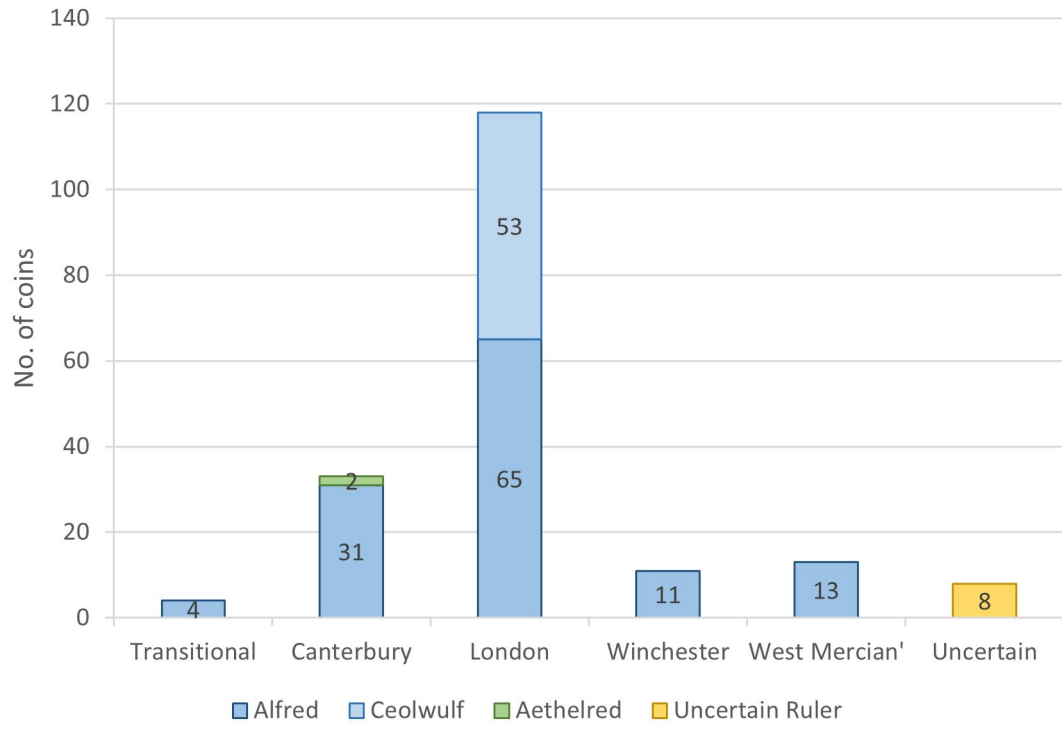


Figure 6.5. Cross-and-Lozenge type coinage by overall Style in the Watlington Hoard.

Comparing the Watlington Hoard corpus to the other recorded finds of Cross-and-Lozenge type coins is informative (Figure 6.6; the coins included are listed in Appendix 1). The London Style is clearly the dominant group in the Watlington Hoard, proportionally in excess of expectations from the earlier finds, while Watlington and non-Watlington examples of Canterbury Style coins are present in comparable proportions and those in the Winchester Style and the 'West Mercian' Style, all struck outside of south-east England, are comparatively under-represented. Whether this reflects where the coins in the Watlington Hoard were collected together or simply the nature of the circulation of coinage in the Middle and Upper Thames Valley around the late 870s is hard to say, but levels of die-linkage suggests that at least some of these coins only circulated within groups. This indicates that the Cross-and-Lozenge coinage, or at least those in the Watlington Hoard, circulated in a limited manner and remained in the same package that left the mint.

The overall weight profile of the Cross-and-Lozenge coins in the Watlington Hoard (Figure 6.7) is comparable to that produced by Blackburn and Keynes (1998: figure 1). The pennies in Watlington peak at 1.30–1.34g and tail off towards the highest weights at 1.45–1.49g, represented by just a few coins. Coins at a lower weight have a longer tail with whole, unchipped examples present at below 1.10g, perhaps to be expected given the far larger sample provided by Watlington. A significant difference is seen in the coins weighing 1.20–1.29g where representation is far higher in the Watlington Hoard coins than in the 1998 corpus. While it remains reasonable to suggest an overall weight standard of *c.*1.35g, the wider overall range seen in Watlington suggests this hypothesis needs to be tested to understand if changes can be seen between mints or across the period in which the Cross-and-Lozenge type was produced. To further explore this and the composition of the Watlington Hoard's Cross-and-Lozenge type coinage in general, it is necessary to look in more detail at each individual style.

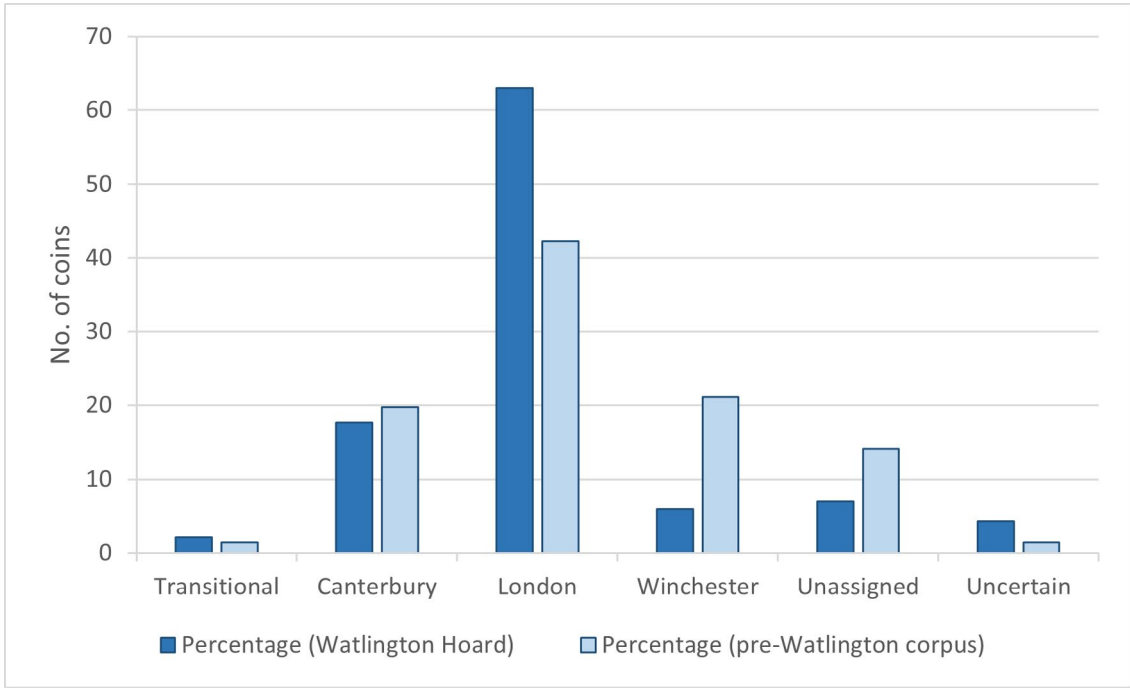


Figure 6.6. Cross-and-Lozenge type coinage in the Watlington Hoard in comparison to the corpus of other Cross-and-Lozenge finds (excluding the 'near Leominster' Hoard).

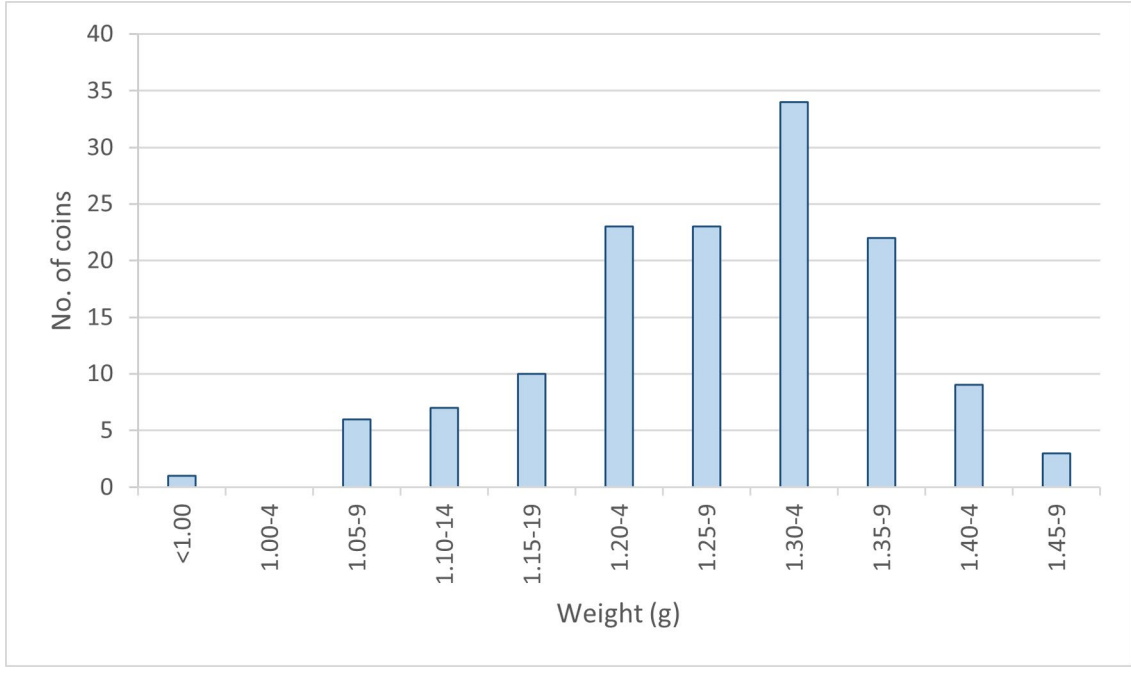


Figure 6.7. Weight distribution of the Cross-and-Lozenge type pennies in the Watlington Hoard. Excludes chipped or fragmented coins.

'Transitional' Style

The four Cross-and-Lozenge pennies in the Transitional Style were probably struck in London, and appear to be the earliest Cross-and-Lozenge phase from the city. Their importance lies in links to earlier issues of coinage including features seen on the Lunettes, Portrait-Quatrefoil and Two Emperors types not seen in the main Cross-and-Lozenge issues, especially the London Style, suggesting their place prior to the main period of production. However, given the few examples present in the Watlington Hoard, plus the single likely example from Southampton (Appendix 1 no.4), little can be inferred about their presence in the hoard beyond the recognition that they were an early Cross-and-Lozenge type. They highlight that the coinage in the hoard captures the Cross-and-Lozenge across its entire period of production, even if this coverage is partial. The weights are variable and only available for three coins (**cat. 2.69–71**), one (**cat. 2.72**) being badly chipped, ranging from 1.22g (**cat. 2.69**) to 1.42g (cat. **2.70**), **cat. 2.69** comparing well to the clustering of weights for Æthelred I's and Alfred's Mercian-style lunettes at *c.*1.20g (Lyons and Mackay 2008: 54), the latter comparable to the Two Emperors type. **Cat. 2.71** lies between at 1.35g, and chipped **cat. 2.72** (1.25g) was probably around the same weight originally. Although it is hard to assess such low levels of evidence beyond noting their variability, two examples are at 1.35g or above and the chipped coin probably around the same when whole suggesting a target weight around 1.40g and is comparable to the Two Emperors.

Canterbury Style

Thirty-three silver pennies in the Watlington Hoard are struck in the Canterbury Style (**cat. 2.1–2; 2.73–103**) enabling more detailed discussions of their classification and the re-appraisal of previous research on the series (see Naylor, Chapter 5). The die-cutting styles identified in the earlier work (e.g. Blackburn and Keynes 1998) — Styles A and B — were generally robust although Style B was further divided into two separate groups (Styles B and C) providing better understanding of the organisation of the style overall and its phasing (Naylor, Chapter 5).

Breaking the Canterbury Style into its constituent sub-styles of A–C (Figure 6.8) shows: 13 coins of Style A, divided between Archbishop Æthelred (2 coins) and Alfred (11 coins), Styles A1 and A2 forming the largest groups; four Style B coins, all of Alfred and using three reverse types; Style C, with its bust design based on either the Lunettes/Portrait-Quatrefoil type issues (Ci) or a Roman prototype (Cii) and consistent reverse design, was represented by 14 coins, all of Alfred; and two coins, both of the moneyer Tirwald, mule a die-linked Style B obverse with Style A reverses (**cat. 2.90–91**). Although the coins of Style C are most numerous, they also show the highest level of die linking (see catalogue 2: **cat. 2.82–85, 2.94–103**) and the lowest numbers of moneyers with just four (Eadulf, Ethelgar, Tirwald and Torhtmund) compared with Style A's ten and Style B's five.

Examination of the weight profile for undamaged coins (Figure 6.9) reveals much variation within the Canterbury Style. This peaks at 1.20–1.24g with over half at below 1.24g, and an overall average weight of 1.23g, the same as that seen for Æthelred I's and Alfred's Lunettes types from Canterbury (Lyons and Mackay 2008: 54–55). This does mask variation within the

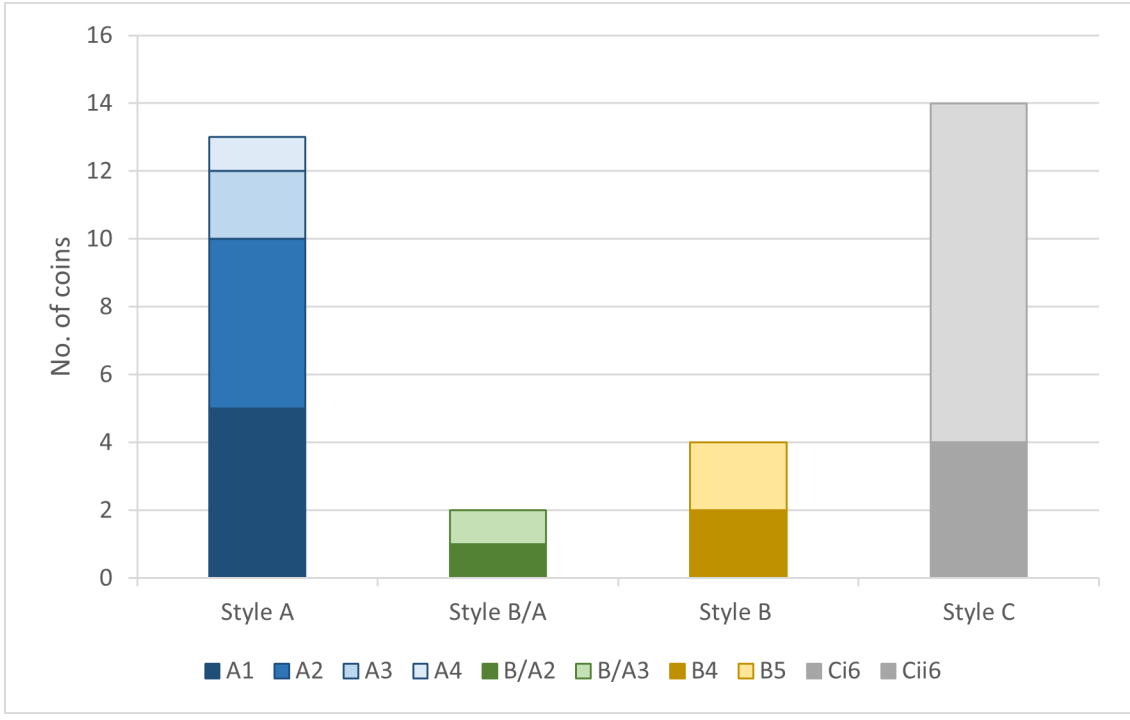


Figure 6.8. The composition of the Canterbury Style Cross-and-Lozenge type pennies in the Watlington Hoard by sub-group.

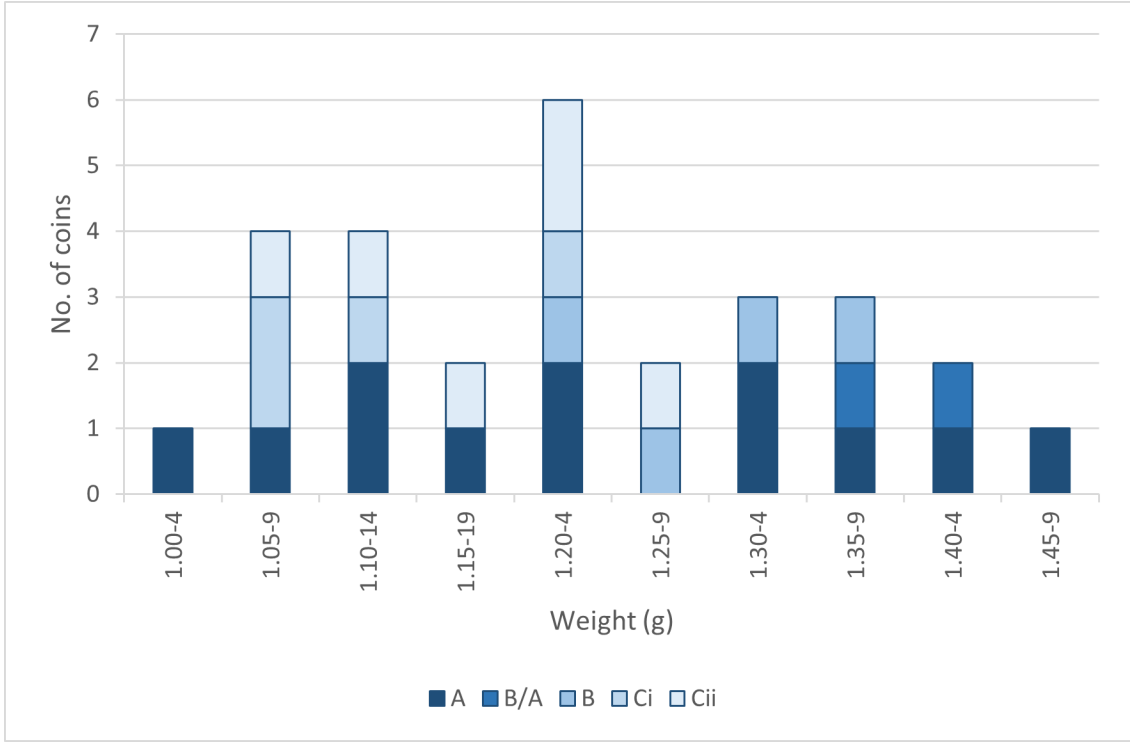


Figure 6.9. Weight distribution of the Canterbury Style Cross-and-Lozenge type pennies in the Watlington Hoard by sub-group. Excludes chipped or fragmented coins.

Canterbury Style corpus, however. Style A coins fall into the widest range, 1.00–1.45g, averaging 1.23g, although it is perhaps noteworthy that both coins of Archbishop Æthelred are of high weight at 1.45g (**cat. 2.1**) and 1.42g (**cat. 2.2**) and are substantially higher than any of Alfred's Style A coins and comparable to the Two Emperors. Without the coins of the Archbishop, the range for Alfred's Style A is 1.00–1.37g, averaging 1.19g. Style B, albeit from only four coins, shows more limited variation at 1.23–1.35g, averaging 1.29g; and Style C 1.06–1.26g, averaging 1.16g, below the weight standard of 1.35g postulated by Blackburn and Keynes (1998: 129). This draws attention to the possibility of variation in the weight standards achieved at different mint places (cf. Figures 6.10–12).

The thirteen moneyers striking in the Canterbury Style (Table 6.1) — two for Archbishop Æthelred and 11 for Alfred — include six not previously listed: Biarnred, Eadulf, Ethelgar, Ethelwulf, Heahstan and Wibearht. It is interesting to note that four moneyers also struck in other die-cutting styles (see below for discussion): Burgnoth (**cat. 2.75–77**) in the London Style for Ceolwulf II (**cat. 2.15–16**); Heahstan (**cat. 2.89**) in the Winchester Style (Appendix 1 nos 56, 58–59; **cat. 2.174–75**); Eadulf (**cat. 2.81**) in the London Style (**cat. 2.24–25** for Ceolwulf II**, cat. 2.126** for Alfred); and Wibearht (**cat. 2.102–03**) in one of the proposed West Mercian styles (**cat. 2.189–90**). Tirwald (**cat. 2.90–97**) is the most prolific moneyer in the Canterbury Style and the only one to strike in all Styles (A–C) alongside two mules of a Style B obverse with Style A reverse. Several moneyers struck in Style A and B (Burgnoth, Diarmund, Ethelred and Guthhere) although not all styles are represented in Watlington (see Catalogue 2 for details), while others are only known from a single style at present (Style A: Biarnred and Eadulf; Style C: Ethelgar and Wibearht), and Torhtmund struck in Style C for Alfred (**cat. 2.98–101**) and Style A for Archbishop Æthelred (Appendix 1 no.18).

The London Style

London Style pennies are the largest part of the Cross-and-Lozenge series in the Watlington Hoard accounting for 118 of the 187 pennies present (63% of the total); 65 were struck for Alfred (**cat. 2.104–68**) and 53 for Ceolwulf II (**cat. 2.6–58**). Figure 6.10 shows the proportion of each sub-style within the Watlington Hoard for each ruler. Style 1a dominates the corpus, with over half of Alfred's and a quarter of Ceolwulf II's London Style coins belonging in this group. It should be considered the standard London Style issue. Style 1 overall provides almost two-thirds of Alfred's London Style output (42 coins; 65%) and 43% for Ceolwulf II (23 coins). The other six styles (2–7) are all present in Ceolwulf II's Watlington Hoard corpus, and Styles 2–6 for Alfred. There are variations within these groups and all are quantitatively quite minor, although 20% of Ceolwulf II's coins and 11% of Alfred's belong to Style 2; eight of Ceolwulf II's are, however, from a single die-linked group (**cat. 2.39–46**). Style 4 is predominantly a Ceolwulf II type, with all of the sub-style 4a in his name and half of the six coins of 4b. What is striking in the London Style, however, is the variation in design (Naylor, Chapter 5). This can be broadly divided between Roman-influenced bust styles (1–4) and Lunettes-influenced bust styles (5–7).

The weight profile of the London Style pennies (Figure 6.11) shows a broad distribution, ranging from 1.09–1.47g for Alfred (although note that **cat. 2.115** weighing 1.00g is only very slightly chipped) and 1.15–1.48g for Ceolwulf II. Alfred's coinage peaks in the range 1.25–

Table 6.1 Moneyers working in the Canterbury Style by subgroup.

Moneyer	Style A	Style B	Style Ci	Style Cii	Rev. 1	Rev. 2	Rev. 3	Rev. 4	Rev. 5	Rev. 6
Biarnred	X				X					
Burgnoth	X				X					
Diarmund	X	X					X	X	X	
Eadulf	X					X				
Ethelgar				X						X
Ethelred	X					X				
Guthere		X						X	X	
Heahstan	X					X				
Tirwald	X	X	X	X		X	X		X	X
Torhtmund			X	X						X
Wynebeorht			X							X
Ethelmund (Archbishop Æthelred)	X				X	X				
Ethelwulf/Ethelulf (Archbishop Æthelred)	X					X				
Torhtmund (Archbishop Æthelred)	X				X					

Red ink = not represented in the Watlington Hoard.

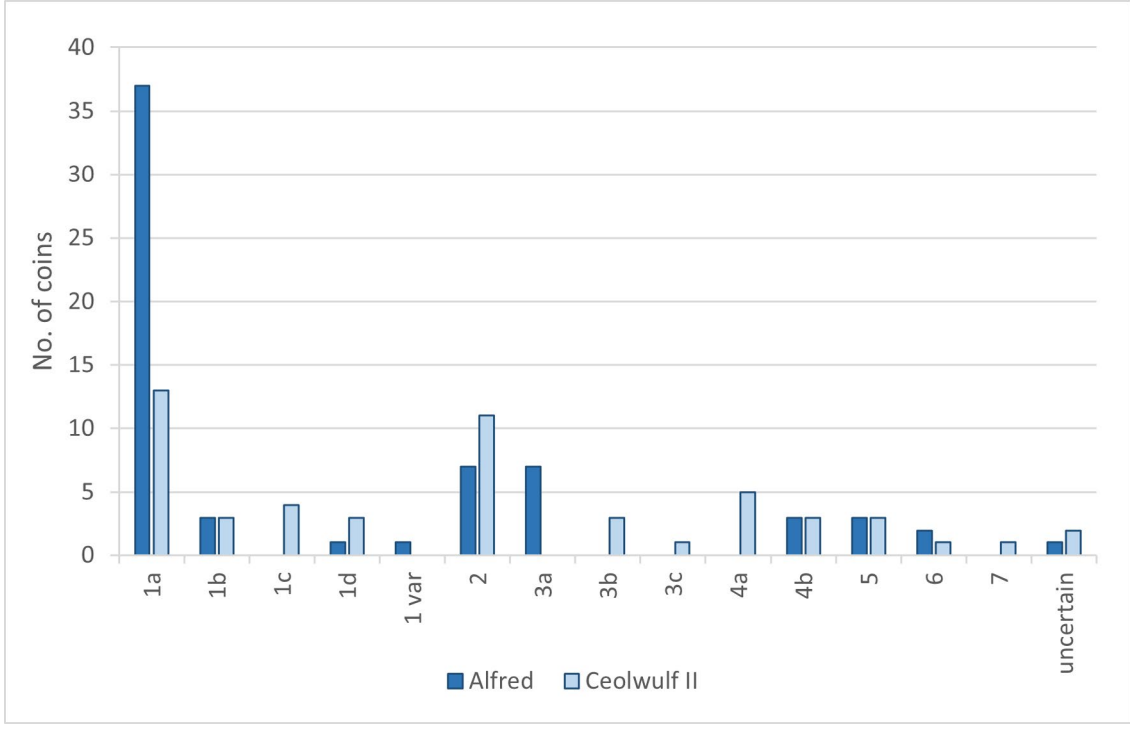


Figure 6.10. London Style Cross-and-Lozenge type pennies in the Watlington Hoard by subgroup and issuer.

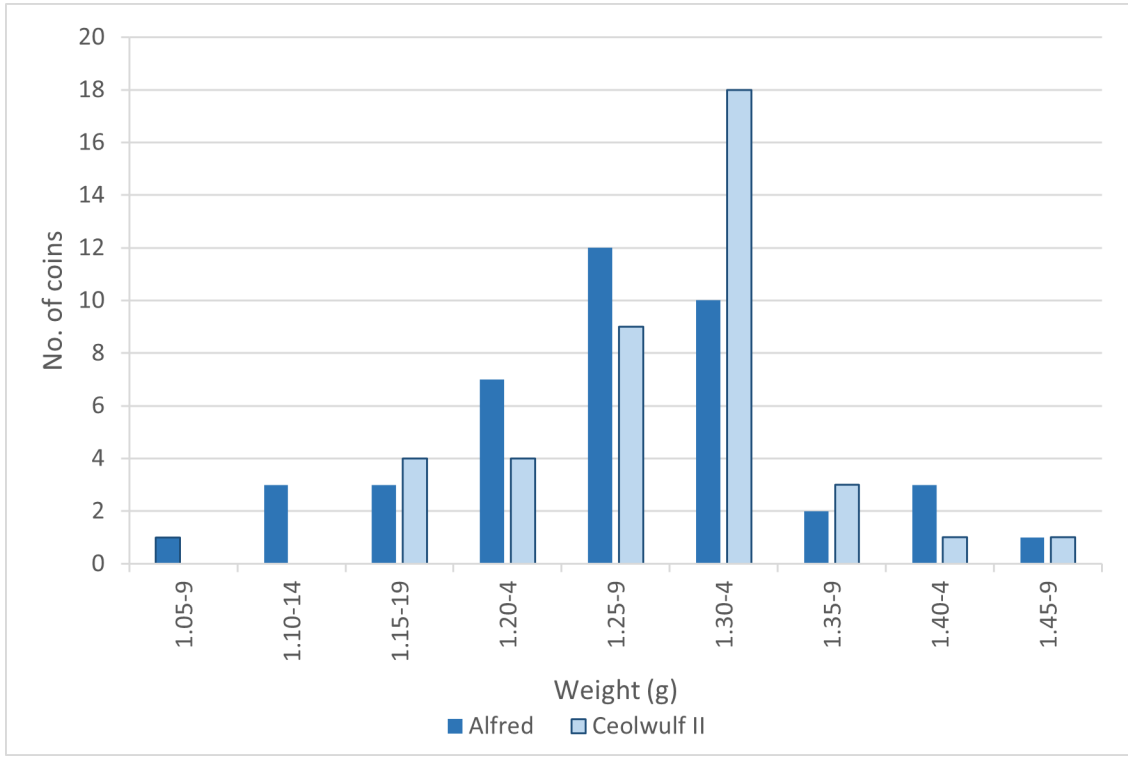


Figure 6.11. Weight distribution of the London Style Cross-and-Lozenge type pennies by issuer. Excludes chipped or fragmented coins.

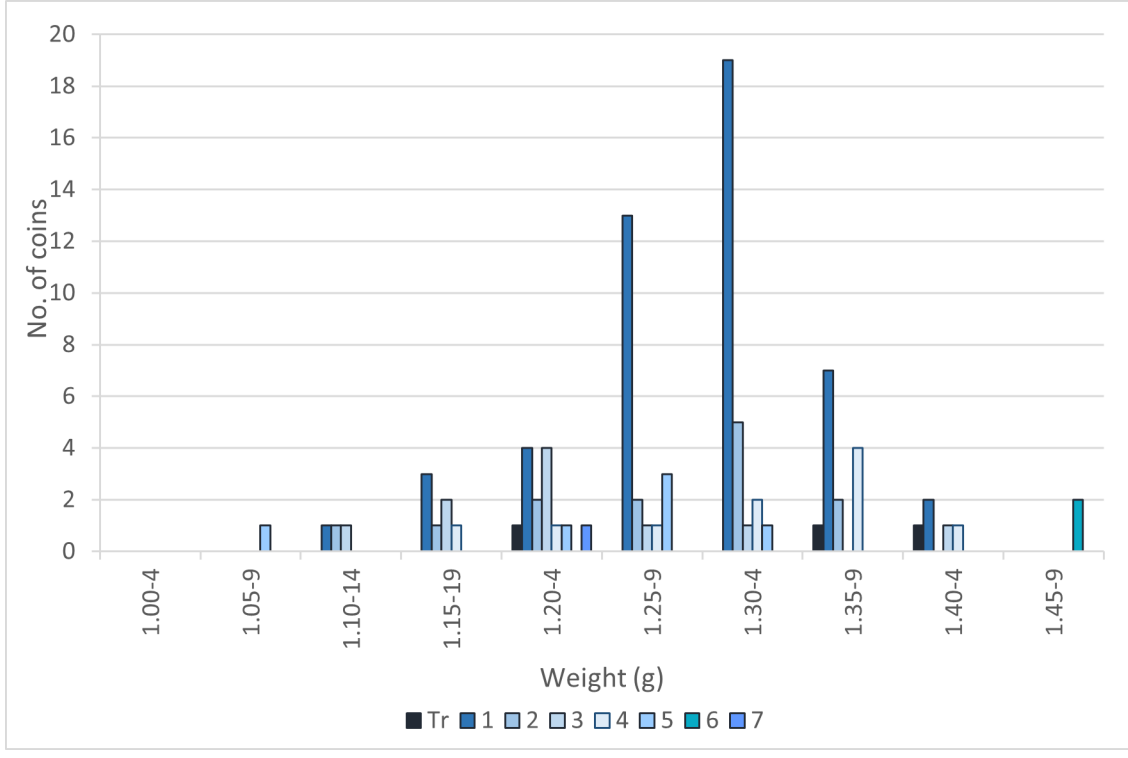


Figure 6.12. Weight distribution of the London Style Cross-and-Lozenge type pennies by subgroup. Excludes chipped or fragmented coins.

1.29g while Ceolwulf II's is a little heavier at 1.30–1.34g although more than half of the coins for both rulers belong to the broader range of 1.25–1.34g (52.4% of Alfred's against 67.5% of Ceolwulf II's). Such a range is consistent with Blackburn and Keynes's (1998: 124) suggestion that the weight standard was around 1.35g once leaching was taken into account, although Watlington highlights the potential discrepancies between the issues of the two rulers. Given the dominance of London Style 1 coins for both rulers it is hard to interpret the weight profiles for the other styles given their comparatively low numbers (Figure 6.12). None show profiles that are particularly different from the overall weight range or from Style 1, although Style 3 is at the lighter end (peaking at 1.20–1.24g), Style 4 the higher (peaking at 1.35–1.39g) and the two complete Style 6 coins (**cat. 2.16** and **2.158**) are heaviest at 1.45–1.49g.

Twenty moneyers are named on coins in the Watlington Hoard for the London Style (Table 5.1), 14 for Alfred and ten for Ceolwulf II. Five moneyers are shared between the two rulers (Ciolwulf, Eadulf, Ecgwulf, Ethelstan and Liafwald) although only two produced in significant numbers in both cases predominantly for one or other ruler (Ciolwulf for Alfred and Liafwald for Ceolwulf II).

The greatest numbers of coins for Alfred were within Style 1a which Blackburn and Keynes (1998: 137–38) considered to be among the earliest coins in the London Style on the basis of the quality of the bust, although their corpus included no examples in the London Style based on Lunettes/Portrait Quatrefoil-style bust designs. However, levels of die-linking in the Watlington Hoard may suggest the opposite, that Style 1 is quite late or, more likely, a long-lived type issued throughout Cross-and-Lozenge production (see below and Naylor, Chapter 5). Eleven moneyers are named for Style 1a (Table 5.2), five of whom (Burgwald, Cenred, Eadulf, Heawulf and Ludig) are not named on any other groups in the London Style. Only three moneyers (Bernulf, Cynelm and Ethelstan) do not occur in Style 1a, although Bernulf's coin (**cat. 2.104**) is a variation on this albeit well outside the main style. **Cat. 2.104**'s similarities to the Two Emperors coin of Ceolwulf II (**cat. 2.3**) have been noted above (Naylor, Chapter 5), and Ethelstan (Style 6) was named in Style 1c for Ceolwulf II (**cat. 2.27–28**). It is in Style 1a where the majority of die-linkage in the Alfred corpus occurs with some relatively large die-linked runs of coins (Ciolwulf: **cat. 2.107–14** obverse and reverse; Ludig: **cat. 2.160–67** obverses plus three die-linked groups of reverse dies with this obverse, **cat. 2.160–62, 2.163–64, 2.165–67**). The 14 coins of Ciolwulf are the most for any moneyer in Alfred's London Style Watlington Hoard corpus struck from six obverse and reverse dies, the moneyers Hereferth (11 coins) and Liafwald (9 coins) are represented by more dies, ten obverse/11 reverse and seven obverse/nine reverse dies respectively.

Ceolwulf II's Cross-and-Lozenge coinage (Table 5.2), although struck by ten moneyers, is dominated by the moneyer Liafwald whose coins account for 29 (55%) of the 53 coins in the Watlington Hoard. Liafwald's coinage is also the most varied, present in Styles 1 (1a, b and d), 2, 3c, 4 (a and b) and 5, and is most prolific in Style 2 with nine examples, although with only three obverse and reverse dies were used in two die-linked groups (**cat. 2.39–44; 2.45–46**) and a single coin (**cat. 2.47**) compared to the six obverse and reverse dies used for Liafwald in Style 1a (**cat. 2.29–31, 2. 34, 2.37–38**). In Ceolwulf II's overall corpus, nine moneyers strike in Style 1, including six in Style 1a, highlighting its importance to the London Style. Only Ciolwulf (**cat.**

2.17, London Style 5) does not, in contrast to his production for Alfred (see above). Another moneyer who is poorly represented in Style 1 is Dudecil (1b; **cat. 2.18**) with five of his six coins in other stylistic groups (Styles 2, 3b and 5; **cat. 2.19–23**) using 5 obverse and 4 reverse dies — the second highest behind Liafwald.

The Winchester Style

The Winchester Style is the smallest group in the Watlington Hoard, just 11 coins, all for Alfred (**cat. 2.169–79**). There is limited die-linking within the hoard (only **cat. 2.169–70**) and two coins (**cat. 2.175** and **2.179**) die-linked to the non-Watlington Hoard corpus (Appendix 1 nos 56 and 62 respectively). There is only a single new moneyer, Burgred, who was not previously listed for the Winchester Style and no coins of Ceolwulf II were present. The style (Naylor, Chapter 5) devolves over time with different reverse types appearing to follow the changes in bust quality (Blackburn and Keynes 1998: 143). The coins in the Watlington Hoard did not include any with the early bust type or early reverse (type 1), only those with Reverses 2 (**cat. 2.172–73, 2.175, 2.178, 2.179**) and 3 (**cat. 2.169–71, 2.174, 2.176–77**).

The weights of the Winchester Style coins (Figure 6.13) are comparatively high compared to the other styles present in the Watlington Hoard, with the exception of single coin of Dunna (**cat. 2.172**) at 0.95g which is itself produced well outside of the main style and may sit more comfortably within the Canterbury Style. Excluding **cat. 2.172** and the damaged coin of Burgred (**cat. 2.169–70**) all of the coins are within the range 1.32–1.45g with an average weight of 1.38g, substantially higher than that seen for the Canterbury or London Styles.

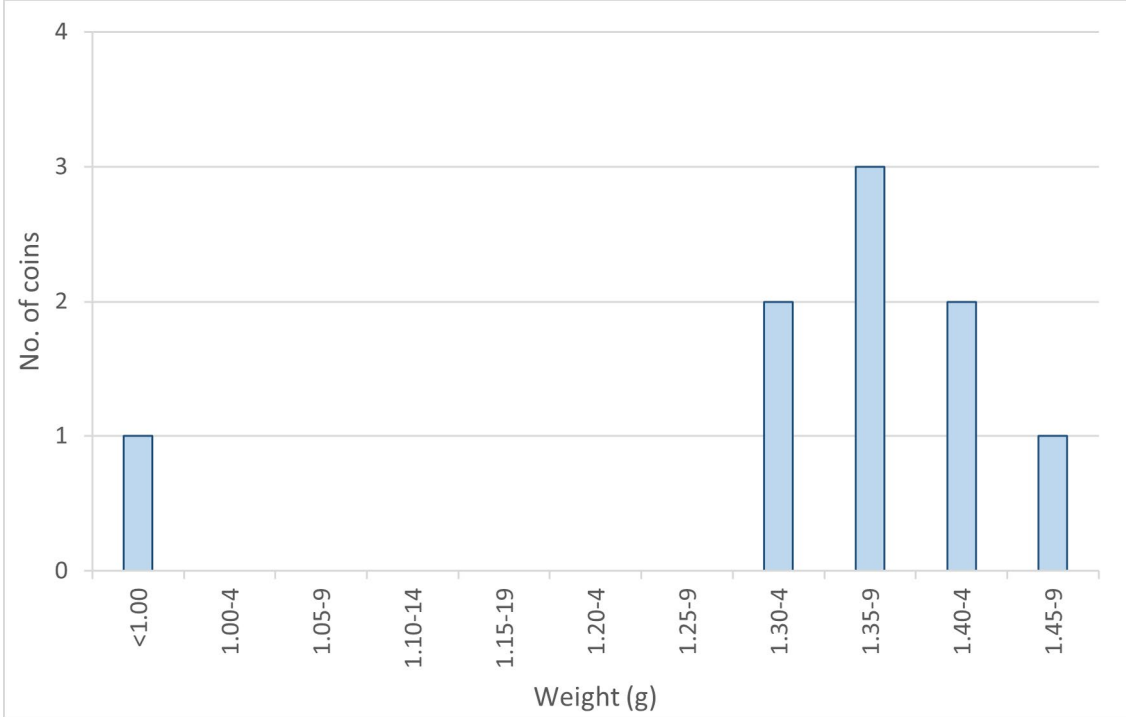


Figure 6.13. Weight distribution of the Winchester Style Cross-and-Lozenge type pennies in the Watlington Hoard. Excludes chipped or fragmented coins.

'Western or southern Mercian' Styles

Eleven coins do not fit into the main styles (Canterbury, London and Winchester) and these were divided into two broad groups based on their drapery (Naylor, Chapter 5; **cat. 2.180–87**, **cat. 2.188–90**). Both were considered potential issues from western or southern Mercia on broader numismatic evidence, although the attribution remains uncertain and the temptation to consider them as defined groups was resisted. As with the Winchester Style they are comparatively under-represented compared to the non-Watlington corpus (Figure 6.6).

Those linked to the larger group (**cat. 2.180–87**; Figure 6.14) have weights ranging from 1.07–1.45g including chipped coins. The six whole examples average 1.23g but all three chipped coins exceed this weight; if included, the average rises to 1.27g. The three coins of the moneyer Lulla in this group includes two die-linked coins (**cat. 2.185–86**) and brings the total known for this moneyer to seven coins overall. The variations in the quality of bust styles across the group, and in the case of **cat. 2.180** (Eacceh), blundered spellings make this a relatively loose grouping and it is possible that some may be imitations, especially those with low weights. No weights are below the lowest levels for the mainstream styles, however, and the crude nature of the die cutting may be due to local imitation of others cut elsewhere by more accomplished hands. The three coins of Regingild and Wibearht, brought together through elements of the bust style are of lower average weight at 1.20g (including one chipped coin).

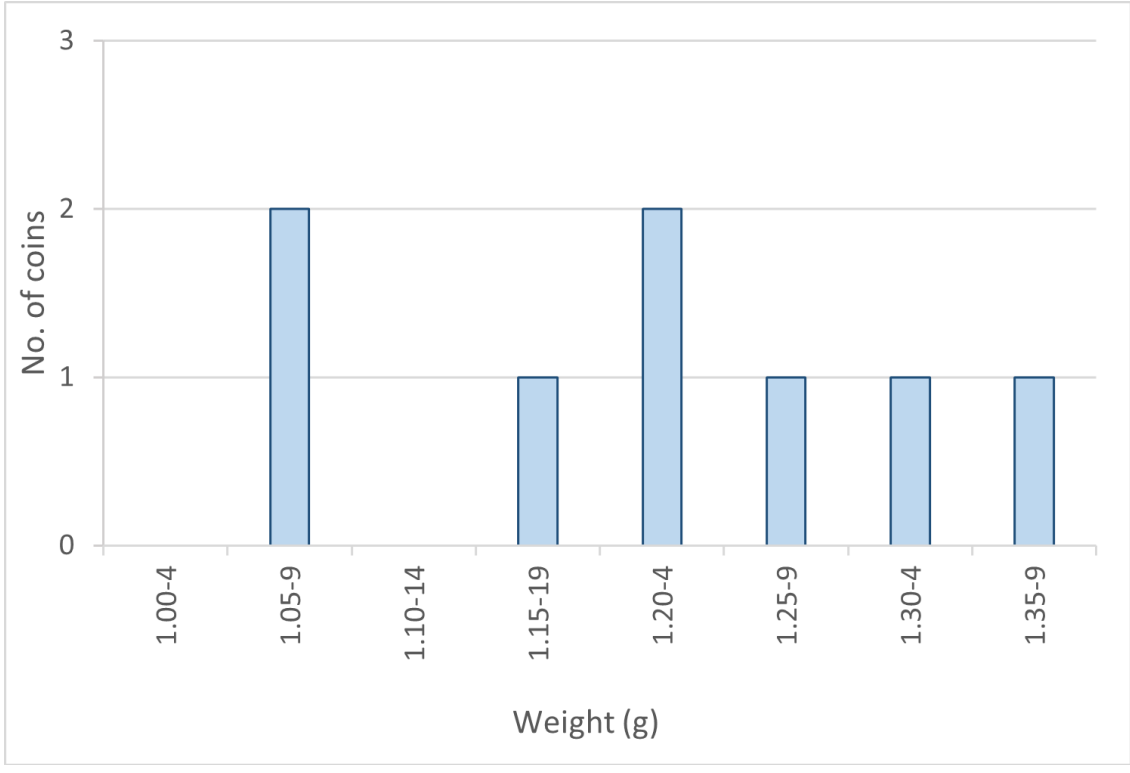


Figure 6.14. Weight distribution of the 'West Mercian' Style Cross-and-Lozenge type pennies in the Watlington Hoard. Excludes chipped or fragmented coins.

Alfred the great: horizontal/two-line type

A single penny of the Alfred's Horizontal/Two-Line type was found in the Watlington Hoard. His main issue post-dating the Cross-and-Lozenge type, the date of its introduction and phasing remain poorly understood although the earliest varieties were probably issued around 880 (Blackburn 1989: 16–18; Naismith 2017: 170–72). The Watlington Hoard coin (**cat. 2.193**) was struck by the moneyer Dealing, who is listed among the early moneyers at London (Blackburn 1998: table 2) suggesting its date of production may be reasonably close to the last of the Cross-and-Lozenge coinage, likely within a year or two either side of 880. This *tpq* of 879–80 provides a plausible date for deposition of the hoard given the lack of these later coins and other issues post-dating the Cross-and-Lozenge type.

Discussion: the coinage of Wessex, Mercia and the Archbishop of Canterbury in the Watlington Hoard

The coinage in the Watlington Hoard was brought together in a short space of time during the late 870s to early 880s, containing no coins struck prior to the Two Emperors issues of *c.* 875. The lack of coins in the hoard belonging to the Lunettes-type coinage, struck before Alfred's 'reform' coins (e.g. Lyons and Mackay 2007; Lyons and Mackay 2008; Mackay 2015), compared to the inclusion of what appears to be the whole period of issue for the Two Emperors and Cross-and-Lozenge coinage requires explanation. Many of the hoards of the 860s and early 870s contain older coins, some including pieces struck 30 or 40 years before such as Dorking (Surrey; deposited *c.* 862) or Trewhiddle (Cornwall; deposited *c.* 868) and most include coins covering a period of at least 10–20 years (Naismith 2011: 71–81). That Watlington does not is interesting and probably reflects the way in which the hoard was put together. The most likely option is that by the time these coins were collected into a group the Lunettes were simply no longer in circulation, implying that the contents of the Watlington Hoard were gathered together quickly around 878–79 and not over a long period of time (see Naylor, Chapter 9 for further discussion). The latest coin in the hoard — the Horizontal/Two-Line type penny of Alfred — belongs to the early varieties from London (Blackburn 1998: table 2) issued from around 879–80. Its occurrence alongside so many Cross-and-Lozenge type coins suggests that it was near enough to the start of production that the older coins had been yet to be re-minted into the new type in any number. This lack of Horizontal/Two-Line type coins and the good, untested (i.e. unpecked) quality of the coins supports the date of the hoard's burial as being close to the Two-Line's introduction. A date of deposition in the 880s or later would not seem plausible from the numismatic evidence.

Die-linking within the hoard for both Alfred and Ceolwulf II is quite high especially for the London and Canterbury Styles and likely represents coin circulating only in groups or packages (see above), no doubt reflecting the wealth of those using coin at this time. However, the dearth of stray finds of both Two Emperors and Cross-and-Lozenge types in general (see Appendix 1) highlights the likely lack of lower-value monetary transactions using individual coins. Twenty-eight of Ceolwulf II's 53 London Style coins are die-linked to another (52.8%), comparable with the London Style in Alfred's name with 33 of 65 coins (50.7%), and 18 of his 31 coins (58.1%) in the Canterbury Style. In the Winchester Style only two coins were die-linked (18%) and while

two of the three coins of Lulla and both Wibearht coins were die-linked in the West Mercian groups, all of the other coins in these two broad groups were single examples of each moneyer with no die-linkage between obverses. Most of these figures are very different to those from the corpus compiled by Blackburn and Keynes (1998). In this, die links were found on only two of 11 Canterbury Style coins, both of Archbishop Æthelred with none in the name of Alfred; four of nine coins of Ceolwulf II in the London Style although three of these were found in the small Pitstone Hoard but again none in the name of Alfred; and two of ten Winchester Style coins for Alfred — both of which were stray finds — comparable with the situation in the Watlington Hoard. None of the coins in 'West Mercian' groups were die-linked to the non-Watlington corpus.

It was noted that the proportions of Cross-and-Lozenge type coins by Style in the Watlington Hoard differed to that seen in the non-Watlington corpus (Figure 6.6). The London Style coins in the hoard are comparatively over-represented with the Winchester Style and 'West Mercian' groups under-represented; the Canterbury Style was comparable to expectations, only a little lower than in the non-Watlington Hoard corpus. This highlights the south-eastern nature of the hoard suggesting, perhaps, that the bulk of the contents were brought together in the Thames Valley or south-east England; it may also reflect a more accurate representation of mint output than seen in the pre-Watlington corpus (discussed further below, Naylor, Chapter 9). To this can also be added the Two Emperors pennies which appear to have come from the mint at London as does the Two-Line penny of Alfred, drawing attention further towards the London connections of the hoard. The lack of coins of the Winchester Style or those attributed to 'West Mercian' mints would fit this pattern, and given the differences in levels of die-linkage between south-eastern styles and those from elsewhere, the pattern may indicate that the two groups were brought together differently.

In trying to ascertain where contents of the hoard were brought together there are also some oddities in the evidence provided by the names of moneyers. While most were only working in a single Style there is evidence that others were not, and this itself highlights that each 'Style' relates to the cutting of dies which has been attributed to locations based on the careers of certain moneyers and that there are complexities in the production of the Cross-and-Lozenge type that we do not yet understand. However, this does not mean that some dies cut in, for example, the Canterbury Style were not intended for moneyers working at other mint places, emphasising the key importance of Canterbury as a mint of primary importance in the 8th and 9th centuries (Naismith 2017: 139–42, 151–53). Within the Watlington Hoard are a number of instances where individual moneyers appear to be striking coins produced in the style of different die-cutting centres (Appendix 2 includes a list of all moneyers and the styles in which they struck), the common element in all cases being the Canterbury Style. The moneyers Eadulf, Ethelred, Heahstan and Wibearht all struck coins in the Canterbury Style as well as other styles. Eadulf struck in Canterbury Style A2 (**cat. 2.81**) and in the London Style for both Alfred (Style 1a: **cat. 2.126**) and Ceolwulf II (Style 1a: **cat. 2.24**; Style 4a: **cat. 2.25**); Ethelred in Canterbury Style A2 and B4 (**cat. 2.86**; the latter is not in the Watlington Hoard: Appendix 1 no.9) alongside the Transitional Style, probably from London, and the 'West Mercian' Style (**cat. 2.183**); Heahstan in the Canterbury Style A2 (**cat. 2.89**) and in the Winchester Style (**cat. 2.174–75**; Appendix 1 nos 56–59); and Wibearht in Canterbury Style Ci (**cat. 2.102–03**) and in the 'West Mercian' Style (**cat. 2.189–90**). The latter is also listed among Blackburn's

(1998: table 2) moneyers working in the West Mercian style for the Horizontal/Two-Line type coinage. Another moneyer, Dunna, known for the Winchester Style has a curious example in the Watlington Hoard (**cat. 2.172**) which is struck in a style similar enough to Ethelred's Canterbury Style A2 (**cat. 2.86**) coin that it may be from the same die cutter, although with the inclusion of MONETA after the moneyer's name it does deviate from other Canterbury Style coins. There are two possible interpretations. First, the coins of these moneyers cut in the Canterbury Style were, in fact, struck in other centres further west adding to the totals seen in the Winchester and West Mercian styles. Second, it is worth re-iterating the important role of Canterbury in the early production of the Cross-and-Lozenge coinage where some dies were cut to be sent out to different centres. The evidence that the Lunettes/Portrait-Quatrefoil types belong to an earlier phase of production than the Roman-influenced busts would be supported to some extent in this scenario, and by the evidence from the Transitional Style. The weight profiles support this to an extent, although here evidence also points towards variations in target weight between mints, even if a wide range of weights are seen across the type. Coins of the Canterbury Style are noticeably lighter on average than either London or Winchester-Style coins, but it appears that coins considered to be the earlier Styles tend to be a little heavier than those with Roman-style busts and closer in weight to that achieved for the Two Emperors. Further work, and finds, will be needed to assess this variation in more detail.

It was argued on stylistic grounds (Naylor, Chapter 5) that the Two Emperors and Cross-and-Lozenge overlapped in their periods of production, at least in part. It might be seen most clearly in the introduction of Roman style busts which, for both, may have been a later addition after die-cutting based on designs from earlier in the 9th century, even the late 8th. This would place the last phase of Two Emperors production (in bust styles 1 and 2) as being contemporary with the main phase of the London Style Cross-and-Lozenge which eventually became the sole type in production from the city. This new evidence for the Two Emperors coinage illustrates its diversity and shows it was issued in greater numbers than previously recognised, operating as a full reform coinage and not one restricted to propaganda and the advertising of an alliance between the kings of Wessex and Mercia.

This wealth of new numismatic data afforded by the Watlington Hoard also informs on the long-held debates over the status of Ceolwulf II as king of Mercia. Famously described as a 'foolish king's thegn' in the *ASC* for the year 874 and considered as a puppet king installed by the Vikings following Burgred's abdication, Ceolwulf's rehabilitation has come from the reassessment of sources highlighting both the propaganda elements in the *Anglo-Saxon Chronicle* and the charter evidence showing him to be accepted as the legitimate Mercian king (Yorke 1995: 102–07; Higham and Ryan 2013: 261; Lavelle, Chapter 4). The evidence from the coinage has long supported such a conclusion (e.g. Blackburn 1998: 116–20), and the additional evidence from the hoard, illustrating the complexities, size and longevity of the coinage, further sustains these conclusions. That Alfred's Cross-and-Lozenge issues may have outlived Ceolwulf's, including Alfred's styling as 'King of the Mercians' (**cat. 2.123–25; 2.154–55**), does however suggest a turn of events late in Ceolwulf's reign (or immediately after) in which the nature of the relationship between the two kings, or the two kingdoms, changed.

The overall importance of the Watlington Hoard to the study of coinage in England in the late 870s cannot be underestimated. The evidence supports the interpretation that it was put together in a short time with little of the coinage included having come from a circulating pool of currency. The contents of the hoard have consolidated our understanding of the different 'Styles' although new questions relating to the production of dies at different centres for certain moneyers are difficult to answer, as is the chronology for aspects of the Two Emperors and Cross-and-Lozenge issues which may have been contemporary in part.

The Carolingian deniers

by Simon Coupland

Two silver deniers (**cat. 2.202–03**; Figure 6.15) of the Carolingian Franks are the only non-Anglo-Saxon coins in the Watlington Hoard. Both are of the very common *Christiana religio* or 'Temple' type. This is known in very large numbers from the reign of Louis the Pious (814–40), but the two coins in the hoard were struck on larger flans, and are significantly later, and rarer. These broad-flan deniers were minted in Italy from 855 onwards, and the two in the hoard date from the reigns of Louis II (855–75) and an Emperor Charles. The latter were minted by both Charles the Bald (875–77) and Charles the Fat (881–87), the two types being distinguished by their size: the earlier deniers are around 25–27 mm in diameter, the later coins 30–32 mm (Gianazza 2013). At 27 mm, the Watlington Hoard coin should thus be attributed to Charles the Bald, which fits with the dating of the Anglo-Saxon coins in the hoard. As for the mints, Gianazza would attribute both coins to Pavia, that of Charles the Bald with greater confidence (cf. Gianazza 2013 : 61, no. 1), that of Louis II more tentatively (L. Gianazza, pers. comm. 2020).

By the latter part of the 9th century there was a clear monetary division between the West Frankish kingdom, whose coinage was almost exclusively of the *Gratia dei rex* type, and the Middle Kingdom formerly ruled by Lothar I (840–55), which stretched from the Netherlands down to Italy (Coupland 2006: 253–54). To date not a single West Frankish hoard has been recovered containing coins of Louis II, which have only been found at Guardamiglio (Italy) and Ilanz I (Switzerland) in the south, Amerongen, Assen and Westerklief II in the Netherlands, and Cuerdale (Lancashire). As for the Italian coins of Charles the Bald, it is likely that they were present in the Guardamiglio hoard, and single specimens were found at Marsum, Westerklief II and Zuidlaren, as well as in the eastern French hoard of Chalon-sur-Saône. What is particularly significant is that two if not three of these hoards are Scandinavian in character: Cuerdale of course; Westerklief II, a typically Scandinavian hoard deposited *c*. 880 (Besteman 2006–07); and possibly Marsum, which contained jewellery and a large number of Scandinavian imitation *solidi* alongside Carolingian coins.

Figure 6.15. The Carolingian deniers in the Watlington Hoard. Top: Louis II (cat. 2.202*). Bottom: Charles the Bald* (cat. 2.203*). Scale 1:1.*

The total absence of these Italian coins in the plentiful West Frankish hoards of the period, coupled with their presence in several Dutch deposits, including the second Scandinavian hoard from Westerklief, strongly suggests that the two coins in the Watlington Hoard came through the Netherlands. Williams (2011b: 49) drew the same conclusion with regard to the Italian coins in the Cuerdale Hoard. There is, however, a significant difference between the Carolingian coins in the two hoards, in that Cuerdale also included a large group of coins of Melle and *Gratia dei rex* coins from western France and the Loire valley. These were likely acquired during raiding (Williams 2011b: 50), but no such component is present at Watlington. Like their counterparts at Westerklief II, the two Italian deniers do not represent the spoils of Viking raids on the West Frankish kingdom (Besteman 2006–07: 60). They could theoretically have been acquired during an attack on Frisia, but are more likely to represent the fruit of trade with the Franks typical of the Scandinavians who settled in the Netherlands in the second half of the 9th century. In that context they should be seen alongside the non-numismatic Scandinavian objects in the hoard (Kershaw, Chapter 7). Assuming that the non-numismatic element of the hoard and these two coins entered the country at the same time, their inclusion at a date close to their striking suggests this material only came from the Continent a short period prior to its burial near Watlington.

Chapter 7

The non-numismatic objects of the Watlington hoard

Jane Kershaw

At first glance, the non-numismatic contents of the Watlington Hoard are not as eye-catching as the large assemblage of rare, late 9th-century Anglo-Saxon and Carolingian coins. The material is comprised predominantly of silver ingots of standard Viking-Age type, together with simple, largely unadorned, arm-rings. Yet these apparently unassuming artefacts were deposited in southern Oxfordshire at a key, transitional phase of Viking activity in England: following a period of raiding in the south-west in the 870s, but before settlement in the Danelaw region of the north and east from the early 880s. Indeed, the items may have been deposited *en-route*, as the Viking army made its way from Cirencester (Gloucestershire) to East Anglia, along old Roman roads and ancient routeways running straight through the Watlington area (Williams and Naylor 2016: 29–30; see Naylor, Chapter 9). Close study of the Watlington Hoard artefacts — their origins, life-span and use-history — can, then, provide unique insight into the background and cultural affiliations of Scandinavians active in southern England at this critical time. Characteristics, such as their weight and degree of fragmentation, also provide insights into the development of the Scandinavian bullion economy, in which weighed silver operated alongside coinage as a means of exchange.

The non-numismatic contents of the Watlington Hoard include 15 complete silver ingots, together with two complete and two fragmentary silver arm-rings, two fragments from two different silver neck-rings, one fragment from a hooked tag and a small piece of cut gold rod (Figure 7.1). In what follows, I review the origins of each object type in turn, before discussing the collective evidence for the function and significance of the assemblage as a whole. I argue that, with the exception of the hooked tag, which is a 9th-century Anglo-Saxon product, the items have a Scandinavian background, with strong connections to southern Scandinavia (Viking-Age Denmark, including northern Germany, southern Norway and southern Sweden) in particular. I argue further that the objects functioned primarily as high-value currency, and were not new when deposited. Instead, they had seen active circulation, within Scandinavia, England or elsewhere, potentially over decades. While it is unlikely we can ever know precisely who buried the hoard, or why, the character of the deposited artefacts is consistent with the view that the hoard was deposited by members or associates of the Viking Great Army, as it moved from Cirencester through the south Oxfordshire area to East Anglia in 879.

Figure 7.1. The non-numismatic objects of the Watlington Hoard.

Ingots

Cast bar ingots can be defined as 'worked metal stored for whatever eventual purpose in a form without function as an ornament' and were made by casting molten silver into open soapstone or clay moulds (Kruse 1988: 288; Kruse and Graham-Campbell 2011: 73). In the Scandinavian bullion economy, ingots were a convenient means of storing and transporting silver wealth, and could easily be worked up into ornaments such as arm- and neck-rings. Ingots are a common feature of Viking-Age silver hoards, from both the Baltic and Scandinavia, and from Britain and Ireland (Hårdh 2007: 104). They form the major component of the Watlington Hoard: 15 are included, all with characteristic cigar-shaped form, rounded ends and consistent oval, triangular or D-shaped cross-sections (**cat. 1.1–1.15**). Many of the ingot surfaces are 'pitted', an effect of the silver being cast in sandstone moulds (Kruse *et al.* 1988: 90).

Ingots can appear in complete or deliberately cut forms, but the notable feature of the Watlington Hoard ingots is that they are all complete. This allows insights into the question of weight units (discussed below) and also sheds light on the function of the hoard. It could, in principle, be a sign that the ingots had not been in circulation for long and were recently cast, serving principally as a store of newly acquired silver. However, the ingots have been heavily 'nicked', that is, they have been cut with a knife or chisel to check that their core metal was not plated debased metal (copper or lead-alloy) and/ or that it had not been subject to deliberate surface enrichment techniques that cause debased silver to appear fine on the surface (Söderberg 2011: 22; Merkel 2016: 28). Six ingots are nicked (Figure 7.2; Plates 1.1–1.2), with the number of nicks ranging from one to nine (**cat. 1.1**, **1.2**, **1.5**, **1.9**, **1.11 and 1.13**). Nicking is most often interpreted as an indication that the item has changed hands in a commercial environment, with the number of nicks broadly reflecting the frequency of transactions (although this is debated, for a discussion see Kershaw 2019: 242). It is clear, then, that the ingots saw active circulation as (high value) bullion and, as a group, were not 'new' when the hoard was concealed. It is difficult to know where ingots were produced. They are found across the Scandinavian Viking-Age territories, are relatively easy to cast (e.g. by casting into wet sand), and, of course, to transport. Nonetheless, it has been noted that silver ingots from Schleswig-Holstein (now modern Germany but was part of southern Scandinavia in the Viking Age), most commonly have a D-shaped or triangular section (Wiechmann 1996: 65–67, karte 76). Conversely, at Kaupang (Norway) ingots with rectangular sections were most common, a pattern that hints

Figure 7.2. Silver ingot (cat. 1.2) exhibiting nick marks along two edges.

at regional variation in ingot form (Hårdh 2007: 108). If this regional framework is valid, the ingots in the Watlington Hoard could be assigned to a southern Scandinavian group, but such association must be considered tentative at present. Notably, most other ingots from hoards in Britain and Ireland possess a similar D-shaped form, including the three intact ingots from the 'purely Danish' silver hoard of Scandinavian character from Croydon (Surrey) deposited a few years before the Watlington Hoard in *c.* 872 (Brooks and Graham-Campbell 2000: 73, 76).

Rings

Ring-money

A complete, undecorated arm-ring is made of a lozenge-sectioned rod. It is penannular in form, the rod tapering to blunt, lightly worked terminals; it carries a single 'nick' opposite the aperture (opening) (Figure 7.3; **cat. 1.16**). At first glance, this piece represents something of a conundrum. It appears to be a classic form of 'ring-money': a term given to a specific form of penannular silver rod arm-ring believed to have circulated as a form of currency in Scotland and the Irish Sea region from *c.* 950 to *c.* 1050 (Graham-Campbell 1995: 30, 38–40, 57–59; Graham-Campbell and Sheehan 2007: 536–38; Critch 2015). Indeed, so similar is this piece to 'ring-money' in terms of its defined lozenge-shaped cross-section, the thickness of its rod and the width of its aperture that, if dropped into the classic 'ring-money' hoard from Skaill (Orkney) (*tpq* 950–70) it would disappear (Graham-Campbell 1995: 38–40). It is thus not surprising that it is linked in the earlier Watlington Hoard publication to rings from northern England, Scotland and the Isle of Man (Williams and Naylor 2016: 10). Yet Hiberno-Scottish 'ring-money' is a development of the mid-10th century. Thus, neither the early date of the Watlington Hoard, nor its location in southern England, fit easily with current understanding of this artefact type.

In fact, as Ralph Wiechmann (1996: 45) was first to point out, Hiberno-Scottish 'ring-money' was preceded by an earlier, yet long-lived, group of plain, lozenge-sectioned rod penannular rings, with a distribution centred on the Baltic island of Gotland (Sweden) (Wiechmann's Type II 14; Wiechmann 1996: Karte 53). Here, the ring form appears in several 9th-century hoards, for instance, from Asarve, Hemse (no *tpq*) and Spillings, Othem (*tpq* 870s). However, the earliest occurrences are further east, and may indicate an origin for the ring type in Russia (Wiechmann 1996: 544, Liste 4, Nr. 1, 18; Table 7.1). The suggestion is strengthened by the fact that, in hoards from Scandinavia, this ring form is commonly associated with Permian arm-rings and Islamic dirhams, both of which likely reached the Baltic by way of Russia (Table 7.1). Weighing 59.86g, the Watlington ring fits comfortably into the weight range exhibited by this eastern 9th-century group, and is notably close in weight to two complete rings from Norrbys, Väte, Gotland (weighing 59.04g and 57.97g; Stenberger 1947–58: vol. II, 243, Fund Nr. 601, Abb. 23). However, the weight range of complete rings of this type appears to be broad (Table 7.1) and it is perhaps best to wait until the individual weights of the 45+ rings of this type from the enormous hoard from Spillings, Gotland, are made available, before commenting further on the possible existence of weight units among this ring group (Thunmark-Nylén 2006: 703).

Figure 7.3. Silver arm-ring (cat. 1.16) *showing small nick on one edge (magnified).*

A Gotlandic/eastern origin for this ring group is thus likely, but it is possible that the Watlington ring reached England via southern Scandinavia. A hoard from Rantrum, Schleswig-Holstein, deposited after 873 and composed largely of silver objects from Gotland, contains a ring fragment of this type (Wiechmann 1996: Kat. Nr. 33 A 6). A complete ring is also known from a coinless hoard from Torvik, Møre and Romsdal (Norway) a hoard which, John Sheehan has suggested, may have been an import from southern Scandinavia, given its inclusion of a broad-band arm-ring of southern Scandinavian type (Bøe 1927: No. 58, m; Sheehan 2011: 97). Given the distance that the Watlington ring has almost certainly travelled, it is notable that it reached England as a complete ring, with only a single nick.

Table 7.1. Hoards with plain, lozenge-sectioned rod penannular rings, dated to the 9th century.

Hoard	***Tpq***	**No. of rings**	**Weight of complete rings (g)**	**Permian ring**	**Dirhams**
Ugodice, Rostovsky, Yaroslavl (Russia)	812/13	1 (complete)	unknown	–	X
Prerow, Mecklenburg Vorpommern (Germany)	814	1 (complete) + 1 (fragment)	43.6	–	X
Kettilstorp, Önum, Västergötland (Sweden)	850	1 (fragment)	–	X	X
Spillings, Othem, Gotland (Sweden)	870/71	20 (complete) + 25 (fragments)	unknown	X	X
Rantrum, Schleswig- Holstein (Germany)	873	1 (fragment)	–	X	X
Watlington, Oxfordshire	879/80	1 (complete)	59.86	–	–
Asarve, Hemse, Gotland (Sweden)	875/6?	14 (complete)	96.57, 74.78, 50, 58.92, 50.04, 46.89, 48.98, 28.14, 41.87, 37.52, 109.75, 73.47, 29.84, 44.43	X	X
Alvara, Böda, Öland (Sweden)	–	*c.* 8–10? (complete)	unknown	X	–
Norrbys, Väte, Gotland (Sweden)	–	2 (complete)	57.97, 59.04	–	–

The Watlington Hoard is the earliest occurrence of this ring-type in England, although a single fragmentary find from North Yorkshire may belong to the same group (DCMS 2006: 64; Kershaw 2020: plate 8). More broadly, this group of rings can be considered alongside a much larger corpus of lozenge- and polygonal-sectioned single-rod rings of various forms and decoration, known from early 10th-century hoards from both England and Ireland, for instance, from Cuerdale (Lancashire) (Graham-Campbell 2011: 102–04) and from Tynan and 'near Raphoe' (Ireland) (both coinless). Its precise relationship to later Hiberno-Scottish 'ring-money' remains a topic for future work.

Broad-band arm-ring fragment

This is a rectangular silver sheet fragment from a parallel-sided broad-band arm-ring, roughly broken at both ends (Figure 7.4; **cat. 1.17**). It is decorated with a median line of stamped dots, flanked by two rows of interlocking dagger-shaped stamps with forked handles. Short, tongue-shaped notches decorate each long side. Broad-band arm-rings are fairly common Scandinavian finds: they can be annular or penannular in form, made of cast or sheet silver, and occur both unornamented and with stamped-decoration (Hårdh 1976: 60–62). The Watlington piece belongs to a particular sub-group with ornament that 'completely covers the outer face of the band with two horizontal rows of cast or stamped decoration, with a zig-zag appearance, on either side of a median line (plain or decorated)' (Graham-Campbell 2011: 91–92).

Figure 7.4. Silver broad-band arm-ring fragment (cat 1.17).

The best parallel for the piece is a complete ring from a hoard from Hørdum, Jutland (Denmark) covered with similar dagger-shaped stamps, in this case with pellets. This ring was found together with two other broad-band arm-ring types and, while it lacks coins, the Hørdum assemblage is dated on typological grounds to the later 9th-century (Skovmand 1942: 29–30, figure 2). Parallels for the ornamental layout, though not the ring form, can also be found on copper-alloy band arm-rings, for instance, from Prestegården, Vestfold (Norway) (Petersen 1928: 154, figure 188). A similar ornamental design, of staggered hourglass-shaped stamps positioned on either side of a median band, also appears on rings of 10th-century Gotlandic origin: Stenberger's 'Typ Ab 4' — examples of which can be found in the Granhagsmyr, Lärbro, and Kvie, Bro, hoards, among others (Stenberger 1947–58: vol. I, 114–15, fig. 15). Given its early date, and particular links with the Hørdum ring, a southern Scandinavian origin seems likely for the Watlington piece.

Scandinavian broad-band rings provided the inspiration for Insular 'ribbon-bracelets': a simplified version of the Scandinavian rings, made from thin sheet metal, sometimes with convex sections. The close relationship between the two artefact groups is demonstrated by a 'ribbon-bracelet' from the Bossall/Flaxton (North Yorkshire) hoard (*tpq c.* 927), with forked-dagger stamps that match the stamping found on the Watlington piece (Graham-Campbell 2011: fig. 1.7). 'Ribbon-bracelets' were produced in Hiberno-Scandinavian contexts from the late 9th century to *c.* 950; thus, an artefact type from southern Scandinavia seems to have been the inspiration for a silver ring series most likely centred on Dublin (Sheehan 1998: 180). Notably, the only other 9th-century Scandinavian silver hoard from England, from Croydon, also contains a Danish prototype for a later Hiberno-Scandinavian arm-ring series (the Hiberno-Scandinavian broad-band arm-ring) (Brooks and Graham-Campbell 2000: 76–77; Sheehan 1998: 177–80). Not only does this reinforce the relationship between 9th-century silver from Viking-Age Denmark and Hiberno-Scandinavian silver products, it also suggests that one of the routes by which silver from southern Scandinavia reached Ireland in the 9th century was via southern England, in all likelihood in the hands of Viking Great Army members themselves.

Two single-rod arm-rings

Two complete single-rod arm-rings are included in the hoard. They are distinguished from each other by the section of their rods, as well as by the decoration on their outer faces. The first ring has a circular section and tapering ends which are twisted once round each other; it has a plain outer surface (Figure 7.5; **cat. 1.18**). Single rod arm-rings are fairly common in Scandinavia, where they appear in both gold (for instance, in the 9th-century Hoen hoard, Norway) and, more commonly, in silver (Graham-Campbell 2006: 79–80). Typically, the tapering terminals are wound round the opposite side, as would have originally been the case here, although spiral knots are also encountered (Sheehan 1992: 213).

Silver rings of this type occur in southern Sweden, on Gotland (as Stenberger's type 'Ar 1') and in Denmark (Stenberger 1947–58: vol. I, 96–99, fig. 8; Hårdh 1976: 55–58, 'Typ I.A'). However, John Sheehan has argued that single rod arm-rings of circular section originated in Norway in the 9th century, becoming popular throughout the rest of Scandinavia only from *c.* 950 (Sheehan 1998: 190–92). Indeed, the earliest coin-dated deposits containing rings of this type all occur in southern Norway (Sheehan 1991/92: 47, table 4). Notably, a single-rod arm-ring of circular section also forms part of the coinless hoard from Torvik, Møre and Romsdal, although it is absent from the only published illustration of the hoard (Bøe 1927: no. 58, with illustration). Sheehan (2011: 97) has suggested that this hoard may have been imported from Denmark. This raises the possibility that single-rod arm-rings had a broader, southern Scandinavian distribution, although it is possible that the Torvik ring was added to an existing assemblage in Norway.

*Figure 7.5. Silver single-rod arm-ring with circular section and tapered, twisted terminals (*cat. 1.18*).*

The inclusion of six complete and 16+ fragmentary examples of this ring type in the Cuerdale Hoard (*tpq* 905–10), in addition to several specimens in the Silverdale (Lancashire) Hoard (*tpq* 900–15), demonstrates that this arm-ring type was among the pool of silver circulating in the Irish Sea region in the late 9th and early 10th century. The example from the Watlington Hoard is the earliest coin-dated example of this ring type in silver in a western Viking context.

The second rod arm-ring in the Watlington Hoard has a lozenge, rather than circular, section, tapering rods which twist around each other and an outer face decorated with punched, linked apex-to-apex triangles each containing three pellets (Figure 7.6; **cat. 1.19**). Rings of this type can likewise be joined either by ends wound around each other or by a spiral knot. They are often plain, but can carry stamped decoration on their outer faces. Examples are known in both silver and gold (cf. the gold example in a hoard from Vulu, Sør-Trøndelag (Norway); Fuglesang and Wilson 2006: 79, plate 35B). John Sheehan has remarked that arm-rings of this type 'appear to have developed in the region of southern Scandinavia and the Baltic, for examples occur in the enormous Spillings hoard, on Gotland. ... though they also occur in Norway, as in the early 10th-century hoard from Grimestad' (Sheehan pers. comm. 2018). A further example, to which an 8th-century dirham was hooked, comes from Bronderup, Skåne (Sweden). The association of this object type with a dirham reinforces the eastern/ Baltic association of the type, which nonetheless appears to have had an early presence in southern Scandinavia (Hårdh 1976: No. 38, Taf. 23:II).

Rod arm-rings with lozenge sections are relatively rare in Britain and Ireland, but a number of recent discoveries indicate that they circulated among members of the Viking Great Army. A fragment of one such ring comes from Torksey (Lincolnshire), the site of their overwintering in 872/3 (Graham-Campbell 2011: 109, note 22), while two similar fragments have been recorded at a comparable site dating to the mid-to-late 870s at Aldwark (North Yorkshire) (Williams 2020). The complete ring in the Watlington Hoard can thus be understood in this context. Like the rod arm-rings with circular sections discussed above, these also circulated within the Irish Sea region in the late 9th to early 10th century. Examples are recorded in the hoards from Galloway (Kirkcudbrightshire), Cuerdale, Silverdale and Warton near Carnforth (all Lancashire). In Ireland, complete specimens appear in three, coinless hoards ('Ireland no. 1', Tynan and 'near Raphoe'), where the 'main associated material....comprises penannular single-rod arm-rings of lozenge section and broad-band arm-rings' (John Sheehan pers. comm. 2018). The stamped decoration carried on the Watlington piece, consisting of apex-to-apex triangles, is part of the common stock of Viking-Age stamped motifs. Such decoration occurs, for instance, on a fragment of a rod arm-ring, of circular section, from the Cuerdale Hoard (Graham-Campbell 2011: 146–47, row 9, cat. no. 1:184).

*Figure 7.6. Silver single-rod arm-ring with lozenge-shaped section and tapered, twisted terminals (*cat. 1.19*).*

Two neck-ring fragments

The Watlington Hoard includes two fragments belonging to two distinct neck-rings, both of which belongs to Hårdh's Type 6, featuring a narrow end-rod (**cat. 1.20 and 1.21**). This is a common form of construction throughout Scandinavia, but in Norway is largely 'confined to the southern parts of the country' and in Sweden 'has a strong presence in the south-east' (Hårdh 1996: 50). On mainland Denmark, it is the most common type, with a particular focus on Jutland (Hårdh 1996: 45, fig. 4, 50). Neck-rings of Type 6 'are closed either with two hooks or with a hook and a loop', and have a western and eastern focus respectively: this feature is, however, missing on the first of the Watlington pieces (Figure 7.7; **cat. 1.20**; Hårdh 1996: 50). This ring has a ring body formed of twisted rods in pairs (Hårdh's type III). This is the dominant ring body type in Denmark, southern Norway and southern Sweden (Hårdh 1996: 55–56, tab. 7, fig. 14). A southern Scandinavian origin for this neck-ring fragment thus seems likely.

Figure 7.7. Fragment of a silver neck-ring of Hårdh's Type 6 (cat. 1.20*).*

The second neck-ring fragment is likewise made of three pairs of twisted rods, twisted together, which have been hammered together into a long, tapering lozenge-sectioned terminal with an open hook and scrolled end (Figure 7.8; **cat. 1.21**). It has three nicks: two on the angle on the terminal rod and one on the hook. Both the end-rod and the construction of the body are mirrored in the neck-ring fragment above. This ring, does, however, preserve a hook, which assigns it to Hårdh's clasp group 'a' (rings closed with two hooks) (Hårdh 1996: 50–51, fig. 10). This clasp group has a western Scandinavian focus. Neck-rings of this type 'have a strong representation in western Scandinavia, in Norway, along the Swedish west coast and in Denmark', as well as in southern Sweden (Hårdh 1996: 50–52, tab. 3). The combination of features again points to a southern/ south-western Scandinavian origin for the Watlington Hoard piece.

Figure 7.8. Fragment of a silver neck-ring of Hårdh's Type 6 (cat. 1.21*).*

Within southern and western Scandinavia, the earliest coin-dated hoards to contain neck-rings of Type 6 date to the early 10th century, making the Watlington Hoard items notably early examples (Hårdh 1996: 68–71, tab. 9). Yet there is an acknowledged difficulty in dating neck-rings, which often occur alone or in coinless hoards, or in coin-dated hoards in fragmentary form, suggesting a period of circulation before deposition (Hårdh 1996: 65). Certainly, the inclusion of a fragmentary twisted-rod neck-ring in the Rantrum Hoard, Schleswig, deposited after 873 and most likely by 900, attests their circulation in the second half of the 9th century, as does the inclusion of a neck-ring formed of three pairs of twisted rods in the Westerklief I Hoard (the Netherlands) (*tpq c.* 850) (Wiechmann 1996: 128–129, Kat -Nr 33, 3; Besteman 1999). That such rings must have also circulated in Britain and Ireland at this date is indicated by the Watlington Hoard finds, and the inclusion of two fragmentary Type 6 neck-rings (one plaited-rod and one twisted-rod) in the Bedale Hoard (North Yorkshire), most likely deposited around 900 (PAS YORYM-CEE620), and of multiple Type 6 neck-rings, in both complete and fragmentary forms, in the Cuerdale hoard (*tpq* 905–10) (Graham-Campbell 2011: 90).

Hooked tag

In the initial publication of the hoard, reference was made to an apparent halfpenny, potentially in the name of Alfred, although its poor state of preservation meant that it could not be identified with certainty (Williams and Naylor 2016: 9, figure 15). Following cleaning and conservation, several details emerged encouraging a reassessment of the piece, and the 'halfpenny' was subsequently identified as a fragment of an Anglo-Saxon hooked tag with decoration in the Trewhiddle style (**cat. 1.22**; Figure 7.9; see Baldwin, section 2.4).

The small fragment represents around a third of a flat, disc plate, roughly broken at each end. Disc-shaped hooked tags are distinguished by the presence of protruding, attachment (stich) lugs or perforations at their uppermost end, as well as by a downward-facing hook: the Watlington piece lacks both features, but this is likely to be due to the position of the breaks, which means only a segment of the disc survives. The back is plain, while the front is decorated with a hatched border, giving the effect of beading. The same pattern fills two surviving arms and a central junction: these divide the surface into two sub-triangular fields, each containing incised linear ornament. This ornament is roughly executed, and in a poor state of preservation, making it difficult to discern. Comparing the ornament to similar, better preserved items, it is possible that one field carries a crude Trewhiddle-style animal, lying with legs bent under the body, with its head turned to look backwards. Such an arrangement occurs, in a more refined manner, on a hooked tag from Thaxted (Essex) (Eleanor Standley pers. comm. 2020; Figure 7.10). The field with two accidental perforations has curved lines in what appears to be a foliate pattern, or it may be a similar animal-form. All the ornament is executed in deep relief. It is likely that the grooves originally contained niello (black silver sulphide), although none now survives.

The Watlington hooked tag therefore belongs to a group of silver hooked tags ornamented in the 9th- to early 10th-century Anglo-Saxon Trewhiddle style, so-called after a late 9th-century hoard (*tpq c.* 868) with ornament of this type, discovered in Trewhiddle (Cornwall) in 1774. The use of beaded borders to divide the surface into multiple, small fields is a key feature of this art style, as is the use of niello inlay against a silver background. Playful, semi-naturalistic animals are typical features of the style, as are leaf and scroll motifs, the speckling of borders and individual motifs (Wilson 1964: 21–35; 1984: 95–105; Webster 2012: 150). Indeed, the foliate identified in the ornamental field on the Watlington fragment has parallels with that on a silver box-like object in the hoard from Trewhiddle itself (Wilson 1964: 183, fig. 39). Notwithstanding the poor condition of the Watlington Hoard hooked tag, the ornament is fairly degenerate: this is not uncommon on 9th-century Trewhiddle-ornamental metalwork, but is less frequently found on silver objects than on objects of copper-alloy (Wilson 1964: 28).

Figure 7.9. Fragment of a silver hooked tag (cat. 1.22).

Parallels for the Watlington piece are widespread in southern England, and show that the panels could be divided in various ways, for instance, into roughly equal quarters by means of a cross; into two larger and two smaller subtriangular fields by means of a saltire, or into three fields by means of a Y-shaped line (see, for instance, Graham-Campbell 1982; Farley 1991). The surviving detail on the Watlington piece, which includes the stub of a third 'arm', suggests it originally displayed a cross. A particularly close parallel, in all but size, comes from the Cote area of Oxfordshire (PAS BUC-0A7E39); while recent finds from Bressingham (Norfolk), and Kingston

Figure 7.10. Silver hooked-tag from Thaxted (Essex; PAS LON-585A83). Scale 2:1.

Deverill (Wiltshire), are analogous examples in copper-alloy (PAS NMS-B62A2C and WILT-3BBB2C). The Watlington Hoard item is notably smaller than these examples — but its small size is not without parallel, as demonstrated by other recent discoveries of Trewhiddle-style hooked tags from Oxfordshire, including one unfinished item which may have been produced locally (PAS WILT-7A7D62; PAS WMID-8F3272). As these items demonstrate, Trewhiddle-style hooked tags were in circulation in Wessex, including the Oxfordshire area, during the Great Army campaigns of the 870s. Whether it entered the hoard along with the parcel of coinage, or independently, either before or after the coins were added, is an open question. Whatever the case, as an object of Anglo-Saxon manufacture, it was most likely added to the hoard in England (see also Naylor, Chapter 9).

The function of the tag is unclear. Hooked tags are relatively common fasteners throughout the Middle and Late Anglo-Saxon periods, and may have been used for a variety of purposes (Graham-Campbell 1982: 145–48). Pairs of Anglo-Saxon hooked tags appear in two 10th-century hoards: from Tetney (Lincolnshire) and the Forum at Rome (Italy) (Wilson 1964: nos 86 and 87; Graham-Campbell *et al.* 1991). In both of these cases, the hooked tags form the only non-numismatic contents of the hoard, leading to the suggestion that they were used to close the bag or purse containing the hoard (Graham-Campbell *et al.* 1991: 223; Naismith and Tinti 2016: 49 fig. 29, 293). This is a possibility for the Watlington Hoard hooked tag, although it is very small size means that it cannot have been placed under much strain, and it is more likely that it was included in the hoard solely for its bullion value.

Gold rod

Alongside these silver items, the Watlington Hoard contains a small fragment of twisted gold rod, cut across both ends, with no nicks (Figure 7.11; **cat. 1.23**). The fragment may have originally derived from an arm- or neck-ring — most likely, given its small size, from the tapering end of a rod. Twisted rods form part of gold rings of late 9th- and early 10th-century date, including an arm- and neck-ring from the Hoen Hoard (Norway) and arm-rings in the Slemmedal, Aust-Agder (Norway) Hoard, deposited *c.* 925 (Fuglesang and Wilson 2006: pl. 35A). Such gold arm-rings also occur in western Viking contexts. A composite gold arm-ring, made up of a pair of twisted rods crudely linked via a short, looped rod to a cut piece from a plain annular arm-ring, comes from Shotton Hall, near Sunderland (Co. Durham) (Graham-Campbell 2011: 242, cat. no. 6), while a single find of a twisted-rod gold arm-ring, with one nick, comes from the York area (North Yorkshire) (DCMS 2006, 63–64).

These items are single finds, and are not independently dated, but the use of gold in presumed economic contexts seems to be a feature of the 9th century in particular (Blackburn 2007a: 78–79). A number of finds from the camp at Torksey indicate the use of hack-gold by the Viking Great Army. To date, there are 18 items of hack-gold from the site, including cut gold ingots and rods (Blackburn 2011: 233; Kershaw 2019). The comparable camp site at Aldwark has yielded two equivalent items of hack-gold, both cut fragments of round-sectioned rod (Williams 2020). Additional single finds of hack-gold from England are presumed to be Scandinavian losses of the late 9th- and early 10th-century (Blackburn 2007a: 75).

Figure 7.11. Fragment of a twisted gold rod (cat. 1.23).

The source of this gold is unclear, and extant gold objects from Late Anglo-Saxon England are incredibly rare (Blackburn 2007a; see also Lavelle, Chapter 4, for gold smithing and a gold ingot from East Hendred, Oxfordshire). However, documentary sources do hint at gold sources, including ransom payments made to Viking armies (Naismith 2012a). Thus, in 872, immediately prior to the occupation of Torksey, the bishop of Worcester sold land for '20 *mancuses* of tested gold' to meet a ransom payment (Whitelock 1996: no. 94; on the *mancus*, see Blackburn 2007a: 57–59). Famously, an inscription contained in the Gospel Book known as the *Codex Aureus* describes how an Anglo-Saxon Ealdorman and his wife paid 'pure money, that was with pure gold' in order to recover the book from the clutches of a Viking army (Whitelock 1996: no. 98). Remarkably, it was on this same Ealdorman's estate, in south London, that the Croydon hoard was discovered (Brooks and Graham-Campbell 2000). It was deposited, perhaps by a member of the Great Army, in *c.* 871/2, just a few years prior to the deposition of the Watlington Hoard.

Discussion

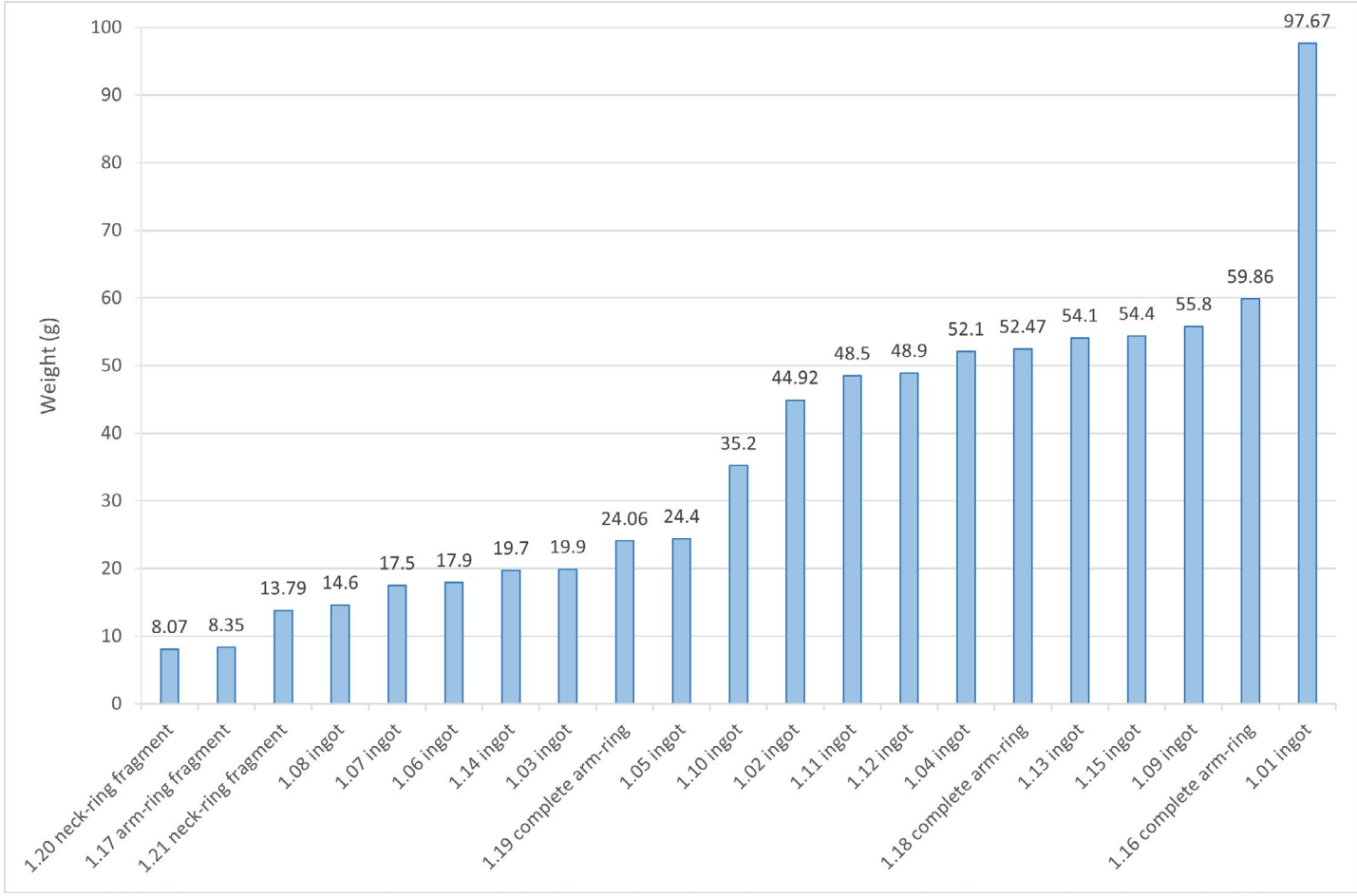
Function

The individual object types contained in the Watlington Hoard represent a broad spectrum of silver artefacts dating to the second half of the 9th century. This was a period of profound change in the use of silver within Scandinavia, as an earlier 'display' economy, based on the public show of wealth, increasingly operated alongside a bullion economy, in which cut and tested silver served as a means of exchange (Graham-Campbell *et al.* 2011). The Watlington Hoard contains both complete and fragmentary ingots and jewellery. What function, then, did the non-numismatic items serve?

There are several indications that the Watlington Hoard was a currency hoard, its silver intended for use primarily (though not necessarily exclusively) within the Viking bullion economy. At first sight, this is not immediately apparent. All the ingots and some of the rings are complete, with the complete rings still able to function as jewellery, as indeed they might have done. The Viking metal-weight economy was versatile, however, and items of jewellery also functioned as stores of metal bullion to be cut up and used when required. Indeed, three of the rings and the gold rod have been deliberately cut and can thus be described as hack-metal. It should be noted that the fragment from the hooked tag is broken, rather than cut, and it is thus unclear if its fragmentation was deliberate or not.

Moreover, there is evidence that the complete objects were manufactured to the Scandinavian ounce or *øre*, a weight unit of *c.* 25g – a feature which indicates that they served as a form of 'money in large units'. The existence of weight-units in the Viking Age is a thorny topic, but a number of studies of complete ingots and rings suggest clustering in weights around a 24–26g unit — a unit which, however, is usually described as 'fuzzy' rather than precise (for example, Kruse 1988: 295–97; Hårdh 2007: 104–07; Besteman 1999: 257; Sheehan 2009: 67). This description is apt for the Watlington Hoard weights (Figure 7.12). The ingots, all of which are complete, group loosely around a 25g unit, with clustering at 25g, 50g and 100g. The weights of the three complete rings, made by hammering out ingots to the desired shape and thickness, conform to this grouping. The clustering at 50g is especially significant, as previous studies of ingots from England and Wales have noted an absence of peaks at 50g and 100g (Kruse 1988: 293, fig. 3; Hårdh 2007: 106). By contrast, 'ingots in Danish and Norwegian hoards seem to concentrate around 50g' (Hårdh 2007: 107) a pattern which may point to a Scandinavian origin for the majority of ingots and the complete rings in the Watlington Hoard. Whether deliberately cut items were cut to conform to specific weight units is an open question. Here, it is worth noting that one of the neck-ring fragments and one arm-ring fragment each weight *c.* 8g, roughly one third of a Scandinavian ounce.

Figure 7.12. Weights of the silver objects in the Watlington Hoard (labelled with catalogue numbers).



In addition to evidence for weight adjustment, the Watlington Hoard silver has been tested for its content by nicking. The Watlington Hoard ingots have a reasonably high incidence of nicking; six out of 15 ingots, all three complete arm-rings and one of the fragmentary neck-ring pieces, are nicked. This pattern of nicking suggests that these items saw active circulation as (high value) bullion — indeed the more extensively nicked items were likely in circulation for some time, potentially decades, before they were deposited in or after 879/80. Tested silver deposited in a hoard can be considered to have 'passed the test', indicating that it likely had a high silver content, and was not debased with lead or copper. XRF surface analysis carried out on a selection of the objects from the hoard by the British Museum during the Treasure Process, suggests that this was the case: reported surface silver contents were in the 94–98% range, in keeping for silver contained in Viking-Age hoards (see Catalogue 1, Table 10.1 this volume).

It is not only silver that appears to have been used as weighed currency by the Vikings. Traditionally, gold and silver have been viewed as occupying distinct circulatory spheres, with gold items preserved for display/ritual purposes, and silver items taking on an economic role (see discussion in Kershaw 2019). Yet a number of finds in recent years suggest that gold too had an economic role within the Viking metal weight economy. This is especially true of the early period of Viking activity in Britain (i.e. the 9th century), when Viking raids brought increased access to gold sources in Western Europe (Blackburn 2007a; Kershaw 2019: 245). One gold *solidus* of Louis the Pious, together with three imitation gold *solidi* — in both complete and fragmented forms — are recorded from the winter camp at Torksey, alongside a lead trial piece bearing an impression of a die used to strike imitation coins; it is possible that imitation *solidi* were produced in Viking contexts (Coupland 2016; Woods 2020). Multiple finds of hack-gold have been recovered from the Viking winter camps of Torksey and Aldwark as discussed above. Torksey has also yielded three items of fake hack-gold: an ingot and two rods with copper cores and gilded surfaces. Since it is unlikely such counterfeit gold had a role in metalworking, this treatment points to a role for gold in economic transactions. To these we can add further single finds of tested gold ingots and rings, in addition to finds of gold alongside silver in what have been interpreted as currency hoards (Kershaw 2019). The find of a small gold cut rod in the Watlington Hoard fits into this wider context. In sum, despite the completeness of the ingots and some of the jewellery items, the silver was most likely not new when deposited, but bears the physical signs of active circulation as monetary currency.

Context and Value

In the context of other Viking-Age silver hoards from England, the Watlington Hoard stands out for two reasons. The first is its southern location, which differs from the northern, predominantly north-western, location of most other hoards of Scandinavian character (Figure 7.13). The second is its early date, most other hoards were being deposited in the 10th century. There are, in fact, just two parallels for the Watlington Hoard, the first of which is that from Croydon (Surrey; deposited *c.* 872), mentioned several times above. Like Watlington, the Croydon Hoard contains a mix of silver ingots and hack-silver originating in Denmark, together with a small parcel of foreign coin including at least seven Carolingian deniers and three Islamic (Abbasid) dirhams (Brooks and

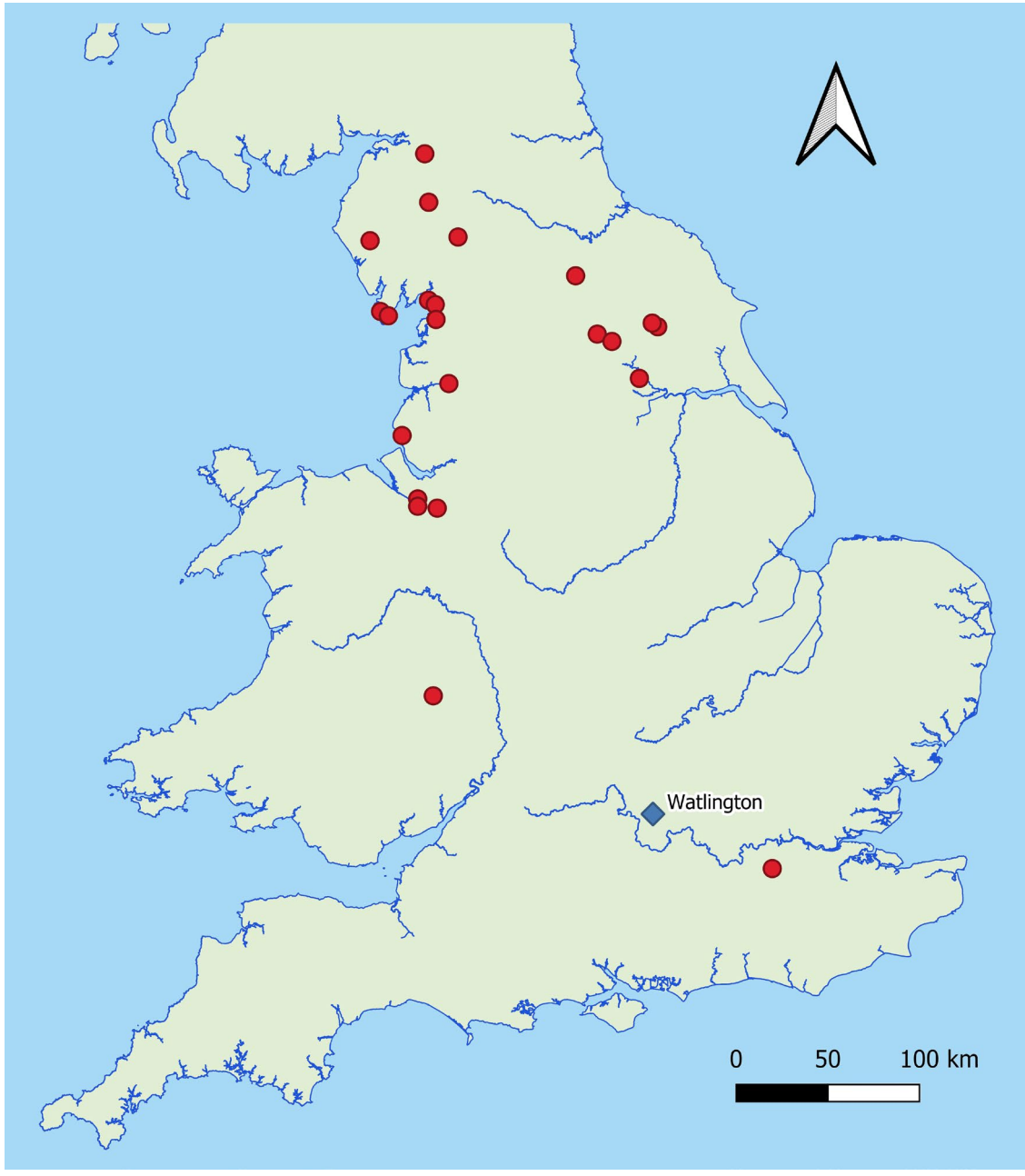


Figure 7.13. Map showing the locations of Viking-Age hoards of Scandinavian character found in England.

Graham-Campbell 2000). Like Watlington, the Croydon Hoard items were brought together with a much larger assemblage of Anglo-Saxon coins drawn from the areas the Vikings are known to have moved between in the three years or so before the hoard was deposited (i.e. East Anglia, Mercia and Wessex). The date of the coins suggest that the Croydon hoard was deposited in 872, the very year that the Viking Army was camped out in London and, although located somewhat to the south of London, the hoard is generally seen as being deposited by 'a Danish soldier of the great army' at that time (Brooks and Graham-Campbell 2000: 91). The other hoard was found near Leominster, Herefordshire (*tpq* 879–80; Hoverd *et al.* 2020). A mixed hoard of coinage and other objects, it is discussed further below (Naylor, Chapter 9).

In the context of other Viking-Age hoards from England, the Watlington Hoard can be considered a small- to medium-sized hoard (see further discussion in Naylor, Chapter 9). The overall weight of the Watlington Hoard's non-numismatic contents is 773.83g. With a total coin weight of just over 212g, the coins and objects together weigh around 985g. This is roughly 1/40 of the size of the largest silver hoard in the western Viking world from Cuerdale (at 42.6kg), interpreted as a potential accumulated 'army pay-chest' (Graham-Campbell 1992: 114); and 1/3 the weight of the Bedale hoard, likely deposited in the late 9th or early 10th century, from North Yorkshire (weighing 3345g). It is, however, roughly twice the weight of the Croydon Hoard (weighing around 515g in total). In this context, it seems plausible that the Watlington Hoard represents the accumulated wealth of one or two individuals.

Concluding remarks

Who, then, buried the hoard and why? While a specific answer is impossible, it is feasible to suggest likely historical contexts for the deposition of the Watlington Hoard. It is clear, for instance, that the material is overwhelmingly Scandinavian in character. With the exception of the Anglo-Saxon hooked tag, all items can be considered culturally Scandinavian: most are representative of the pool of silver circulating in 9th-century southern Scandinavia, even if some have origins further east. The physical treatment of the silver (the testing and fragmentation), in addition to the evidence for weight adjustment, also points to circulation in Scandinavian cultural spheres. More broadly, the mix of ingots, jewellery and hack-silver with foreign and domestic coin, is characteristic of other Viking-Age hoards of Scandinavian character from England. While the Vikings did not have a monopoly on the practice of hoarding (see, for instance, discussion of the Plumpton Hoard (Sussex) in Thomas 2013), I think it highly likely that the silver was in Scandinavian hands at or shortly before deposition. The similarities to the Croydon Hoard — interpreted as the wealth belonging to a member of a Danish Viking army — were noted above. The southern Scandinavian make-up of the Watlington Hoard's non-numismatic contents, coupled with its local, Wessex and Mercia coin inclusions, and its location in southern Oxfordshire, is compelling evidence that it belongs to the same context of Viking Great Army activity in England in the 870s/ early 880s. It likely represents the wealth of one or two enriched, but not necessarily high-status, Viking Great Army members — predominantly wealth brought to England from southern Scandinavia, and supplemented with more recent acquisitions, as the army engaged in battle against, and potentially negotiations with, Alfred of Wessex.

Acknowledgements

With thanks to John Sheehan for information about the finds from Tynan and 'near Raphoe' (Ireland) discussed in this chapter.

Chapter 8

Money in southern England in the 870s in the light of the Watlington hoard

Julian Baker

From the middle years of the 9th century, rapid Viking expansion into different central and southerly areas of England impacted decisively on the already complex political situation there. Matters came to a head in the early 870s. Wessex under Æthelred I (865–71) and his younger brother Alfred, and, after the death of the former in the spring of 871, Alfred alone, faced a major onslaught from the Viking Great Army (Yorke 1995: 109–11). Alfred was defeated at Wilton (Wiltshire) shortly after his accession, but neither side gained sufficient advantages and the Vikings retreated, probably after being paid a tribute. The Vikings spent the winter of 871–72 in London. The Mercian king Burgred (852–74), Alfred's brother-in-law, also attempted to make peace with the Vikings through apparent payments in 872 and 873. These were to no avail since the Vikings then engaged in a northward expedition, as a result of which Burgred was ousted in 873–74. Ceolwulf II became the last king of the Mercians upon the flight of Burgred, apparently being invested in some form by the Vikings. The eastern part of the kingdom of Mercia was eventually incorporated directly into the Danelaw (877). According to the Worcester king-list, Ceolwulf II reigned for five years, putting an end to his reign in about 879. He was succeeded, in 883 at the very latest, by Ealdorman Æthelred, acting as lord of Mercia on behalf of Alfred, his father-in-law, who may by this stage have been recognized as king of the Anglo-Saxons (Miller 2004).

In 876 a Viking army led by Guthrum entered West Saxon territory. Wareham (Dorset) was taken, and it is possible that tribute was paid by Alfred to the Vikings, again without obvious effect since, rather than retreating, they merely moved on to Exeter. In 878 Alfred managed to escape imminent defeat at Chippenham (Wiltshire) and to gather sufficient forces to defeat Guthrum at Edington (Wiltshire) later on in the same year. Standard accounts based on the *Anglo-Saxon Chronicle*, such as that by Barbara Yorke (1995: 111), do not credit Ceolwulf II with any role in these developments.

Nevertheless, knowledge of an important coinage reform of Alfred in conjunction with Ceolwulf II had entered general Anglo-Saxon historiography well before the discovery of the Watlington Hoard. In spite of the dearth of relevant specimens, some significant numismatic studies, particularly those of Mark Blackburn (Blackburn 1998; 2003; Blackburn and Keynes 1998), managed to inform a wider audience: according to Miller (2004) 'the cross-and-lozenge penny was the product of a reform of the coinage, carried out by Alfred and Ceolwulf together'. Sawyer (2013: 82) wrote that '...in 875 Alfred, with the agreement of Ceolwulf II, undertook a major recoinage, issuing a new type that had five times as much silver as the coins they replaced'.

In the same passage, Sawyer (2013: 82) continues by saying that this reform 'was an astonishing demonstration of royal authority at a time of very great difficulty'. This implies that the reform required particular political will, perhaps more so than any other overall prevailing condition. He also states that such a reform was in fact a necessary pre-requisite for the garnering of support in the fight-back against the Vikings. We will leave aside for the time being these particular interpretations of the reform. The fact alone that a coinage which these different writers have considered impressive was launched at all during the period in which Alfred and Ceolwulf II were in power concurrently, and that it was then sustained through the following years, will bear our particular consideration in the context of the Watlington Hoard.

This hoard is the single-most important piece of evidence for southern English coin issuance in the mid-870s. Significantly, it was concealed at the cusp of the next major coinage reform which saw the introduction of the Horizontal/Two-Line type (**cat. 2.193**), but at a time that bore witness to the full extent of the earlier coinages issued concurrently by Alfred and Ceolwulf II. The Watlington Hoard is also of great use to our understanding because of its relatively large size, and the fact that it was concealed in a central area of Anglo-Saxon power, at the south-eastern border between Mercia and Wessex (see also Lavelle, Chapter 4).

This chapter takes the information developed in other contributions to this volume, especially Chapters 5 and 6, and considers afresh the dates, sizes, and qualities of these different issues. Some minor differences of interpretation will occur. On the vexed question of mints, bearing in mind that none of the discussed coins bear mint signatures, I have followed the suggestions in these other chapters in their entireties. I will not second-guess nor qualify them by distinguishing between mints as geographical locations in which coins were struck or dies were made, or which lent their names to a particular style of manufacture. Once the parameters of coin issuance are laid out we can appreciate the nature and importance of the reformed coinages in the names of Alfred and Ceolwulf II, on political, economic and military levels. In doing so I will make reference also to a recent paper (Weisberg 2020) which is remarkable for having quickly identified the historiographical potential of the Watlington Hoard without having all the necessary data at hand.

Dating of the reign of Ceolwulf II of the Mercians

According to a regnal list from Worcester, Ceolwulf II reigned for five years from his accession in 874 (on this and what follows: Miller 2004). Welsh and Irish annals mention an 'English' leader who killed Rhodri Mawr, king of Gwynedd, in 878; this leader may be identified as Ceolwulf. It appears to be probable that shortly thereafter, in 879 or 880, he ceased to be king of the Mercians. The division of Mercia between the Vikings and Ceolwulf in 877, and a possible alliance between the two parties, are considered by Weisberg (2020) to have been significant caesuras in the latter's reign and in his relationship with Alfred. Following this line of interpretation, this author states that the change of fortune post-Edington may well have induced Ceolwulf II to step down rather earlier than has hitherto been supposed.

Dates of the two joint coin types, of the Horizontal/Two-Line Type of Alfred, and of the concealment of the Watlington hoard

It is generally assumed that the Two Emperors and Cross-and-Lozenge types were minted successively in this order (Naylor, Chapter 5). It is also commonly held that the first of these types was commenced relatively quickly after Ceolwulf II's accession, within about a year or so. Only Lyons and Mackay (2008: 27) have suggested a slightly later chronology for the two joint types, which went hand-in-hand with the greater emphasis they placed on the Lunettes type under Alfred (compare also the discussion below on this type); the authors saw the Two Emperors type as part of a general period of experimentation in around 876 which Ceolwulf II participated in only partially. Previously, Blackburn and Keynes (1998: 132) had assumed that Ceolwulf II joined Alfred to mint at London belatedly and that there were two rather distinct phases of minting there for Wessex and Mercia (later adjusted in Blackburn 2003: 213). According to Lyons and Mackay (2008), the year 877 provided the general conditions for a more extensive issuance of coinage, to which the Cross-and-Lozenge type was central.

The Watlington Hoard contradicts some of these postulations in the sense that the Two Emperors type looks more like an integral part of a reformed coinage, which came in two phases during which both Alfred and Ceolwulf contributed significantly. In terms of size and importance, the hoard elevates the Two Emperors type above the very rare Quatrefoil type issues, which are not present at Watlington (see below). Minting in the names of both rulers looks to have been concurrent. The harmonious aspect of the Two Emperors coinage by both rulers, especially the reverses, is also proof in this matter. There is nothing in this hoard which positively suggests that the Cross-and-Lozenge type was not commenced in 877, as Lyons and Mackay (2008) proposed. On the other hand, the many issues of this type in the hoard leaves the possibility open that the type may have commenced slightly earlier. Naylor (see Chapter 6) has also suggested a small period of overlap between the Two Emperors and Cross-and-Lozenge type. An initial dating of 877 for the type would fit in with Archbishop Æthelred's rare Canterbury issues, the production of which may, according to such a chronology, have been curbed due to worsening relations with Alfred. For this reason there are very few specimens in his name known at Watlington and elsewhere. On the other hand, Weisberg's (2020) exposition would require a proportion of the type to have been minted before 877, when Ceolwulf is said to have tightened his control over London to the detriment of minting in Alfred's name in the city. In fact, the typological break down of the London issues for both kings (see below) now makes such a scenario unlikely and undermines the overall validity of Weisberg's interpretative scheme which saw the division of Mercia at the hands of Vikings and the Battle of Edington as a turning point in the relationship of the rulers.

The hoard does underline emphatically that the Cross-and-Lozenge type followed on from the Two Emperors type. There are stylistic parallels between Two Emperors busts and those of the previous Lunettes coinage, and a transitional phase, which combines different iconographical features of both types, that has now been conclusively revealed (Naylor, Chapter 5).

The hoard can also suggest that, on average, 15 Cross-and-Lozenge type coins may have been produced for every Two Emperors coin (see below). This may have a bearing on the proposed chronology: if the second of these types were to be located in the years 877–79 or 880, then it seems indeed a reasonable proposition that the minting of the Two Emperors type was confined to the first year or so when Alfred and Ceolwulf II were reigning concurrently. The matter of quantification is further addressed below.

The Watlington Hoard is also large enough to allow for some chronological nuancing within the Cross-and-Lozenge type. For example, it can be postulated that within Blackburn and Keynes' Canterbury Style (1998: 134–37), sub-styles A and B might have been minted first and to some extent concurrently, followed by sub-style C (Naylor, Chapter 5). The many London Style specimens of different styles in the hoard also appear to prove that, contrary to some earlier views, Alfred and Ceolwulf II minted there approximately concurrently and over the entire chronological range of this type (Naylor, Chapter 5). It is possible that London Style 1, for instance, which is known in good quantities for both rulers, was minted rather late, or at least across much of the length of the issue, in view of the crucial evidence of the involvement of moneyer Dealing and the new evidence of the Lunettes-influenced types of London Style 5 which may be earlier than Style 1 (see Table 5.2 and discussion by Naylor, Chapter 5).

With respect to the Horizontal/Two-Line type, it is generally accepted that this issue came after the previous Cross-and-Lozenge type, and that the absence of relevant issues of the more recent of the types in the name of Ceolwulf allows us to date this transition to 879 or 880 (a good overview is provided in Blackburn 1989: 16–18). This probable sequence is only clouded by the dating of Alfred's London Monogram issue, now placed in *c.* 880 and potentially between the Cross-and-Lozenge type and Horizontal/Two-Line type (Blackburn 1998; Mackay 2019). Nevertheless, as noted already by Blackburn (1989: 16), the Cross-and-Lozenge type and Horizontal/Two-Line type show close affinities on the level of moneyers. This picture is reinforced by the many more specimens now known from the Watlington Hoard. The hoard adds an additional precision in another respect, by suggesting a transitional phase. According to Table 5.1 and Catalogue 2, the aforementioned Dealing had been a moneyer for both Alfred and Ceolwulf during the Cross-and-Lozenge phase. The fact that coins of Alfred in London Style 1 minted by Dealing **(cat. 2.123–25**; Figure 8.1**)** all share an obverse die may suggest that he was operating close to the concealment date of our hoard. The same Dealing is the only moneyer represented in the hoard for the Horizontal/Two-Line type (**cat. 2.193**). The weight of this coin, 1.38 g, is rather intriguing. It is considerably lower than the supposed new weight standard of 1.6 g for the new type, yet the small chip which is missing from this otherwise uncirculated coin cannot account for this discrepancy. For this reason it seems possible that this coin adhered to the earlier inferior standard. Such a transition has also recently been shown by Mackay (2019) to have taken place in the early phase of the Monogram type. It can possibly also be inferred from a few other specimens of the Horizontal/Two-Line type not contained in the Watlington Hoard. Examples that can be given of relatively light coins, of similar style and including the same moneyers as contained in the Watlington Hoard, are known for Dealing (Lyon 2016: no. 631), Hereferth (Thompson 1967: nos 266, 268) and Ludig (Robertson 1961: no. 573; Thompson 1967: no. 269). Nevertheless, any such phase would have been short-lived. For example, only four of the 192 specimens of Alfred's regular Monogram issues which Mackay

Figure 8.1 Cross-and-Lozenge type (cat. 2.124) and Horizontal/Two-Line type (cat. 2.193) of Alfred struck by the moneyer Dealing. Scale 2:1.

(2019) managed to assemble belong to such a transitional phase on the grounds of their weights. The single specimen in the Watlington Hoard of the Horizontal/Two-Line type was therefore arguably minted before the two new types (Horizontal/Two-Line and London Monogram) became fully fledged in all their attributes.

With respect to the concealment date of the hoard, the presence of merely one specimen of the Horizontal/Two-Line type is unusual. However, this coin is in itself unusual, from the point-of-view of its moneyer and weight, as we have just discussed. This picture manages to focus our minds with respect to the concealment date of the hoard. We have the clear sense that we are situated in a transitional phase of minting, between the introduction of the Horizontal/Two-Line type and the culling of the joint types of Alfred and Ceolwulf II, which took place after the hoard's formation and concealment. The coins of the Cross-and-Lozenge type in the Watlington Hoard also showed little sign of wear (Naylor, Chapter 6), and, as we shall discuss below, some known moneyers and supposed dies were absent. These are additional reasons to locate the concealment of the hoard precisely on the cusp of the end of the Cross-and-Lozenge type and the beginning of the Horizontal/Two-Line type. 879 or 880 seems to be the most reasonable date, not merely for this typological transition but also for the concealment of the Watlington Hoard itself.

The Lunettes type and the Quatrefoil types

The Lunettes type (see Figure 3.2, Chapter 3) was a very substantial coinage for Wessex and Mercia, and the last of the major southern coinages. It is particularly associated with the Burgred, hence one of the designated names of the type. In *c.* 867 Wessex also adopted this type (Blackburn 2003: 204; Lyons and Mackay 2007; Naismith 2017: 162–63). In the years which followed, coin production for Wessex and Mercia increased substantially. The last phase of the Lunettes type touches upon a variety of matters which are relevant to the Watlington Hoard, including: production and circulation in the late 860s and early 870s; political cooperation of Wessex and Mercia; the positionings of these kingdoms *vis-à-vis* the Vikings; and macroeconomic matters. It is therefore worthwhile to consider its exclusion from the Watlington Hoard.

Regarding the standard of the issues during the Lunettes phase, Metcalf and Northover (1985) have demonstrated through an extensive run of metallurgical analyses that the silver standard the pennies of Wessex and Mercia were minted at was reduced to between a third and a half fine by the last years of the 860s, and to a fifth to a quarter fine during the contemporary reigns of Alfred and Burgred (from 871). This scheme has since been corroborated by Mackay's much more extensive survey of the coinage (Mackay 2015: 132). Metcalf and Northover (1985) did not consider this course of debasements a result of silver shortage, but of a desire to increase royal revenues and ultimately the stock of coinage. Once such a policy was applied, the situation could easily spin out of control, especially in the light of the monetary union between Wessex and Mercia, which was effectively in place. It would have been difficult for any of the two kingdoms to unilaterally halt this downward trend without the danger of its issues being driven from circulation (on the mid-9th century situation compare also Naismith 2020: 196–97). In a situation where two coinages superficially resemble each other, bear the same face value, and can therefore both be used for the same payments, but in which these same coinages do not have the same intrinsic value (i.e. one is deficient in weight or fineness), then logically the one of lesser intrinsic value would be used preferentially. The more intrinsically valuable coins would typically be hoarded or exported to an area where their greater value was more appreciated. This monetary phenomenon is referred to as 'Gresham's Law'. This said, it appears that something untoward was nevertheless happening to the weights during the last phase of the Lunettes type, with Wessex coins consistently slightly lighter than their Mercian counterparts (Mackay 2015: 132).

The last phase of the Lunettes type issues under Æthelred I and Alfred for Wessex, and Burgred for Mercia, was re-considered in detail by Lyons and Mackay (2007; 2008) and Mackay (2015). The corpora of specimens and the finds-lists established by these authors (for a much earlier attempt to gather all the hoard evidence, see Dolley and Blunt 1961: 78) would corroborate without doubt the metallurgical evidence, that is to say a massive increase in coin issuance in the later 860s and early 870s.

The West Saxon adoption of the type is of course in itself an indication of more concerted minting activities. It was during this phase after *c.* 867 that Wessex was minting increasingly at London, in parallel with Mercia and using the same moneyers. From the reign of Æthelred I (called by Lyons and Mackay (2008: 38 and 44) 'Group 3, Wessex Irregular Lunettes coins'), Wessex minting was in part also supported by the same Mercian die cutters. Alfred's Lunettes coins has similarly been divided into Wessex and Mercia type issues, constituting respectively 62% and 33% of the known specimens. This renewed emphasis on London in southern English monetisation suggests that the Viking presence did not have a negative impact on coin production, particularly during the aforementioned events of 871–72.

The numbers of moneyers minting for Mercia and Wessex in these years are also impressive. For Phase III of Mercian Lunettes minting, 44 moneyers have been counted (i.e. for the years *c.* 868–74), compared with 28 moneyers for Phase II, that is to say the ten years before 868 (according to Mackay's (2015) chronological scheme). There were a total of 34 moneyers minting Lunettes coins (Groups 2 and 3) for Æthelred I from *c.* 867–71. A staggering number of 68 moneyers is

known for Alfred's Lunettes coinage. This is a sure sign that production was increasing in the early years of his sole reign. This picture and the political uncertainties of the mid-870s had induced Lyons and Mackay (2008: 64–65) to push this type into the second half of the decade. In view of the Watlington Hoard, and the new emphasis it places on the Two Emperors type, this is no longer imperative.

Even more impressive are, however, the number of dies which can be established for the different issues. For Phase III of Burgred's coinage, Mackay (2015: 137) gathered a sample of 521 coins, in which he observed 476 obverse dies (423 singletons, i.e. dies represented by only one coin) and 493 reverse dies (455 singletons). These figures mean that the sample, despite its size, only manages to capture a rather low percentage of the original dies used, in line with the current statistical formulas (which suggest around 20%, although this can only ever be a ball-park figure). We can appreciate that Burgred's Phase III was a very large coinage indeed, but we do not presently have the means of quantifying this further (compare below with the discussion in the next section). For Wessex during the same years, the main Group 2 ('Wessex Regular Lunettes coins': see Lyons and Mackay 2007: 102) of Æthelred I produced a sample size of 118 coins, representing 102 obverse and 99 reverse dies. For Alfred the sample size of Lunettes coins was 197, the present obverse and reverse dies respectively 182 and 177 (Lyons and Mackay 2008: 42 and 57). Again, these figures cannot be used for any viable statistical extrapolations, suffice it to say that the numbers of dies produced for Æthelred and Alfred were high for what were very short-lived coinages.

We must finally mention the first of the reformed types, exceedingly rare today and not included in the Watlington Hoard. These are, according to the chronology and interpretation of Blackburn and Keynes (1998, 129–31; Blackburn 1998), the Geometric-Quatrefoil type and the Portrait-Quatrefoil type. Chronologically, these are to be placed between the Lunettes type and the Two Emperors type. Issues are currently known for Alfred and Archbishop Æthelred. On this basis and on the identity of one moneyer, the issues have been attributed to the London and Canterbury mints.

The minting of the Two Emperors and Cross-and-Lozenge types: quantity

The 13 coins of the Two Emperors type contained in the Watlington Hoard were spread across a number of variations (Styles 1–4 on the obverse), minted by a host of moneyers (see Table 5.1), and only two specimens shared a die (**cat. 2.66–67**; Naylor, Chapters 5 and 6). At present it is impossible to quantify the production of this type using die counts because our sample contains too few of original dies to be statistically viable (i.e. 'coverage' is too low: see below on die counts and the formula that is applied). We must remain open to the possibility that this coinage was issued in larger numbers than the currently available specimens allow us to believe. Because the hoard is well mixed for the two main types which it contains, it retains some statistical usefulness. We are, for instance, able to suggest that within this type, the quantities for Ceolwulf II were smaller than those minted for Alfred.

The Watlington Hoard demonstrates that the introduction of the Two Emperors type was accompanied by an effective withdrawal of the previous substantial type (the Lunettes type). It also shows that there was no such cull of Two Emperors coins during the subsequent transition to the Cross-and-Lozenge type, if indeed it is believed that the two types were mostly issued one after the other. We may presume furthermore that the latter type is represented in the hoard at a relatively advanced state of maturity, since the hoard also includes a specimen of the later Horizontal/Two-Line type. For this reason the numbers of specimens in the hoard may give a good impression of the overall production rates of the two types: three specimens of the Two Emperors type for Ceolwulf II as compared to 53 Cross-and-Lozenge pennies (i.e. for every one coin of the first type there were 18 of the second); ten Two Emperors specimens for Alfred against 120 Cross-and-Lozenge (1:12). We may conclude therefore in general terms that the issue of the Cross-and-Lozenge coinage was between ten and twenty times larger than that of the Two Emperors type.

This said, despite the relatively late concealment of the hoard in terms of the production period of the Cross-and-Lozenge type, there is the suspicion that the Watlington Hoard has only been able to capture these issues partially. This is highlighted by looking at the list of known moneyers for the Cross-and-Lozenge type (see Table 5.1) and by comparing it to the moneyers actually represented in the hoard.

It would be useful therefore to test the degree of representativeness of our sample, and to quantify the issues further, by establishing the number of obverse and reverse dies present in the Watlington Hoard. This is done by looking at and comparing the coins themselves (the relevant data — each die is individually numbered — can be found in Catalogue 2). The basic assumption which needs to be applied in this exercise is that, in overall terms, the original number of dies used in the production of these coinages correlates to their overall sizes of issue. In order to extrapolate an original die number from a number represented in a sample, in this case the Watlington Hoard, one has to apply one of the current formulas which numismatists have at their disposal, for example Esty's (2006).

Mainly for technical reasons, obverse and reverse dies were almost always produced in different quantities. With respect to the types represented in the Watlington Hoard, the dies which feature the head of the king (the obverse) were evidently more difficult or expensive to produce than the two reverse types (especially the Cross-and-Lozenge). For this reason they would have been better protected during the striking process, sitting as they did most likely in the anvil. As a result fewer were required as they broke less frequently.

Formulas such as Esty's rely on decent 'coverage', that is to say the more of the original dies represented in a given sample the more reliable and useful the original die numbers suggested by the formula. In general terms, the threshold of usefulness in Esty's formula is a coverage of about 0.5. Anything below that will result in suggested original numbers which cannot be worked with to any degree of confidence. In attempting to maximise coverage when seeking to extrapolate original die numbers from sample die numbers, it is therefore often useful to look at the side of the coin for which fewer dies were originally required because it gives a sample a higher chance of covering an adequate number of dies.

However one turns it, nevertheless, for some of the issues present in the Watlington Hoard this coverage is very low. For Alfred's and Ceolwulf II's London Style issues even the obverses only have a coverage of about 0.2 (much lower of the reverse dies). This level of coverage is too low to attempt meaningful estimates on original die numbers. The best coverage is achieved for Alfred's obverses at Canterbury, at 0.52. For this issue Esty's formula gives us a range between 43 and 98 original dies, which, with a confidence of 95%, went into the production of this coinage.

However disappointing the Watlington Hoard might be for revealing precise quantifications of mint outputs based on die counts, this picture manages to hold our attention from a different angle. The general lack of 'coverage' which we have just observed suggests in fact a thoroughly mixed currency as a result of vivid coin usage and circulation. This stands in contrast to the views one might instinctively have had about the content and formation of the Watlington Hoard, and the nature of English coinage in the later 870s in general, in the light of the military events that have been described.

We can state that the Cross-and-Lozenge type would have been minted over about three years with a combination of obverse dies, at London, Canterbury, Winchester, and elsewhere, in the names of Alfred, Ceolwulf and Æthelred, which ran into the hundreds. This might have resulted in millions of coins, by all accounts a noteworthy minting operation. The contemporary culling of earlier issues of the Lunettes type are equally proof of the serious intent with which the West Saxon and Mercian authorities applied themselves to the monetisation of southern England in this short period.

The minting of the Two Emperors and Cross-and-Lozenge types: quality

A considerable effort would also have gone into increasing the silver content of the coins. Initially, according to the chronology and interpretations which have already been given, the Quatrefoil types may have signalled an adjustment in line with the superior continental weight and fineness standard (Blackburn 1998: 106). The idea of reforming the coinage stock may, in itself, have been inspired by a continental precedent, the re-coinage under Charles the Bald in 864 (Blackburn 2003: 202–03). However, by the time the main reformed Two Emperors and Cross-and-Lozenge types were introduced, the weight had evidently slipped back to the traditional English standard. Nevertheless, these two types contained five times as much silver as the last Mercian and West Saxon Lunettes type issues. It has also been pointed out that the English and continental levels of fineness, before and after the respective reforms of 864 and *c.* 875, were not dissimilar. Again, a continental lead in English monetary decision-making can be inferred. In the light of our observations above on the rapid and contemporary debasements in Mercia and Wessex during the Lunettes phase, it is all the more remarkable that these two kingdoms enacted such a substantial increase concurrently in the subsequent phase. If we apply the logic developed by Metcalf and Northover (1985), the regular and abundant supply of continental silver to the English mints which had supported the increase in coin production before 874, would have assisted the attempts thereafter to issue a finer coinage. Accordingly, silver crossed the Channel because of and not in spite of the ongoing conflict between Saxons

and Vikings, since the political situation afforded new business opportunities, particularly in the slave trade (Metcalf and Northover 1985: 151). The precise fineness of specimens in the Watlington Hoard are still being established, yet it appears that the Two Emperor and Cross-and-Lozenge types were of analogous good fineness. Nevertheless, the Watlington Hoard alone may not be in a position to resolve all metrological nuances of this period. Figures 6.4, 6.8, 6.10, and 6.12 (above, Naylor Chapter 6) may reveal a reduction in weight (i.e. a different kind of debasement) from the first to the second of these types, but this impression is based on very few specimens indeed (especially in Figure 6.4) and must remain preliminary.

Lyons and Mackay (2008: 64–65) suggest, reasonably, that production for the reformed types of Wessex and Mercia would have been smaller than the coins of the later Lunettes type phase. They based this on the respective finenesses of these issues and the number of moneyers involved. The die information which they established is very important, but it is in some respects as lacunary as the die information we have for the reformed types. In the broadest and most unreliable terms we may state, for what it is worth, that Alfred seems to have issued the Lunettes type over about four years from in the region of 700–1000 obverse dies. He had the later Cross-and-Lozenge type produced at Canterbury and London for a rather shorter time from under 500 obverse dies. Also, the Watlington Hoard has now substantially increased the numbers of moneyers known to have been active in the second half of the 870s. Since many factors shaped the quantity and quality of the southern English coinages before and after the reform, some external to England, we cannot currently rule out that the Two Emperors and Cross-and-Lozenge types were minted in larger quantities than had hitherto been believed.

The minting the Two Emperors and Cross-and-Lozenge types: mints, metals, and organisation

The Two Emperors type was minted mostly or entirely in London. Comparisons with the earlier Lunettes type issues are especially important in coming to this conclusion. The evidence lies in the moneyers, and in the stylistic and epigraphical features spanning these types. Confirmation that Ceolwulf II also minted this type at London was established relatively recently (Naylor, Chapter 5). The fact, however, that Alfred and Ceolwulf share only one London moneyer (Beagstan), according to evidence from the Watlington Hoard and elsewhere, and that Ceolwulf might have had other coins of the type produced at another mint (style 4), shows us that there were limits to the apparent co-operation and harmonisation (Naylor, Chapter 5). The different nomenclature in the legends of the coins is also testimony to a disconnect: whereas Ceolwulf is denoted as the king of the Mercians (**cat. 2.4–5**), Alfred is 'king of the English' (**cat. 2.59–67**; already noted in Dolley and Blunt 1961: 81). During the previous Lunettes phase he was still merely 'King Alfred', while in the subsequent 'Transitional' Style the tendency to denote him as king of the Saxons commenced (**cat. 2.69–70**: Naylor, Chapter 5).

We must recall at this point that joint Mercian and Wessex minting in the same locations and by the same moneyers was not an innovation of the reform period. During the previous Lunettes phase there had been issues in the names of Æthelred I, Alfred and Burgred which produced precisely such a pattern, as we have seen.

There is a great degree of continuity from the Lunettes coinage to the reform in terms of moneyers. This can be established quite emphatically by the new evidence from the Watlington Hoard (Table 5.1), in combination with the corpora assembled by Lyons and Mackay (2007; 2008) and Mackay (2015). Such developments take us through the last phases of the Lunettes type, the Two Emperors type, and often the Cross-and-Lozenge type. We can appreciate from this that the reform itself rested on well-established foundations of Mercian and Wessex collaboration, and that London was central to this process. The evidence of moneyers is not always easy to use; the importance of variations to the orthography of names, and the styles of the issues on which they are represented, cannot be gauged at all times. Yet it seems that nearly all of the moneyers active for the phase of the Two Emperors (Beagstan, Cenred, Cuthberht, Eadulf, Heawulf and Hereferth) are also known for the earlier Lunettes, and the subsequent Cross-and-Lozenge type. A good number of other moneyers active for Burgred or Alfred, especially at London, emerge then in the latter phase, having apparently been inactive for the Two Emperors type.

Alfred probably issued the Two Emperors type exclusively at London. His rare Quatrefoil type coins, which preceded it (see above), may have originated both at the Canterbury and London mints. We can now see that it was during the said 'Transitional' phase that mints other than London were perhaps being prepared to issue the new and, what proved to be, a somewhat more lasting and prolific type. In the course of the Cross-and-Lozenge phase the network of mints was further expanded, which was an important element in Alfred's monetary policy (on this and what follows, see Blackburn 2003). At Canterbury, some of Alfred's most prolific issues bore the names of moneyers he had already used for the Lunettes coinage, for instance Tirwald and Torhtmund (**cat. 2.90–101**).

Minting can be considered an important territorial marker. It is true that existing minting structures are extrapolated by modern historians from stylistic differences on the coins which would have been completely irrelevant to contemporaries. Nevertheless, many people in 870s southern England would have been attuned with the important and evolving political fortunes and would have been sensitive to the origin, availability, and reliability of the currency which they required for basic economic transactions or their dealings with authority. The Winchester mint was gaining in stature (for the significance of the focus of power in Winchester see Lavelle, Chapter 4; see also Naylor, Chapter 5), and Alfred may have issued coinage in an area to the north of the Thames not too far removed from Watlington in West Mercian territory (**cat. 2.180–92**; Naylor, Chapter 5). On these particular coins Alfred is termed king of the Saxons. In contrast to London and Canterbury, the moneyers active in the more minor minting centres had, for the most part, not been heard of before the reform. Despite of the proliferation of minting under Alfred, the currency as a whole, and the Watlington Hoard in particular, remained heavily weighted towards the London mint in the first instance, and then the Canterbury mint (Naylor, Chapter 6). Looking at the London specimens contained in the Watlington Hoard, certain moneyers minted exclusively for one or the other king. For instance the aforementioned Beagstan is now known exclusively for Ceolwulf. The latter is variously called 'king' or 'king of the Mercians' in the obverse legends of the Cross-and-Lozenge type, without any apparent pattern (**cat. 2.6–68**). Other moneyers minted in good quantities for both kings, for example moneyer Liafwald (we may assume that 'Liofwald' and 'Lifwald'

represented the same person; **cat. 2.29–57** and **cat. 2.151–158**). On London issues, Alfred is mostly termed 'king', more rarely 'king of the Saxons'. The significance of one die of moneyer Liafwald (CLo103, **cat. 2.154-155**) which designates Alfred as **REX M** or **REX SM** (king of the Saxons and Mercians?) is difficult to establish (although see discussion in Naylor, Chapter 5). Might it denote some kind of supremacy, already contained in the formula 'king of the English' during the Two Emperors and 'Transitional' phase, or control over London, or was it a mistake given that this moneyer and the die cutters associated with him also worked for the Mercian authorities? The fact that there are Cross-and-Lozenge coins of moneyer Dealing giving Alfred as **REX S M** may alternatively denote, given the possible late dating of Dealing's activities, that this was perhaps a solution found during the time when Ceolwulf II had ceased to be ruler in Mercia (see above on both of these counts).

All in all, the sample of specimens contained in the Watlington Hoard may be too small to get to the heart of some of the nuances in nomenclature, suffice it to say that epigraphically, Alfred sought to be expansive and to reach beyond the confines of his own Wessex ever since the inception of the Two Emperor type. It might be of interest in this respect, finally, that Alfred's Canterbury issues confine themselves to the simplest of designations, '**REX**', in contrast to his issues at London, Winchester, and those in possible Mercian territories.

The reformed coin types of the later 870s: usage and circulation, political and military implications

The coins contained in the Watlington Hoard were all minted within a mere handful of years, and — with the exception of the two foreign coins and some coins from a possible mint in Mercian territory — in a confined area of south and southeast England. The absence of earlier Lunettes type coins of Burgred or Alfred is remarkable, yet the presence of merely one specimen of the most recent type, the Horizontal/Two-Line type, is in many ways even more noteworthy. At the same time, the London Monogram type, of contemporary or even earlier date, is absent. General hoarding patterns dictate that there would be a concentration of recent types and a tailing off towards older issues. We have already dwelt on these considerations in the earlier part of this contribution, and it is the last phase in the hoard's formation which is indeed unusual, but can nevertheless be explained. A key piece of information in this regard must surely be the mixed aspect of the main Two Emperors and Cross-and-Lozenge type coins in the hoard. The unique Horizontal/Two-Line type coin present in the hoard, together with the non-numismatic items in the hoard which have a broadly Scandinavian, 'non-English' profile (see Kershaw, Chapter 7), and the two Italian deniers of the Carolingian dynasty (Coupland, Chapter 6) may all be additions to the great bulk of English coins of the two main types.

Broadly, therefore, the hoard may be divided into an English and a Scandinavian component. Not only would the two elements have undergone very different histories before being hoarded jointly in what is now south Oxfordshire. The latter might also not have had a bearing on the former in a broader sense. In other words, it unlikely that the English coinages of the middle and later 870s would have been minted from incoming silver associated with the Vikings. It is

much more probable that standards and the immediate inspiration for reforming the coinage were borrowed from the continent, although of course the ideal of returning to older and better standards is inherent to all coinage traditions. As in many other periods of medieval minting, English types in the 870s were arguably issued from recycled Frankish coins. The overwhelming domination of the traditional mints of London and Canterbury underlines this pattern.

The evidence derived from the Watlington Hoard allows us to appreciate and expand the picture of southern English developments during the 870s. It normalises the situation in London itself, in line with Mark Blackburn's postulations, as being a place where both Wessex and Mercia were free to commission monetary specie (perhaps under Alfred's leadership, hence his designation as 'King of the Angles/English' during the initial phase; see Blackburn 2003: 214; and above). It also shows us that something akin to free monetary usage and circulation was possible during these difficult years. It is unlikely that the bulk of the Two Emperor and Cross-and-Lozenge type coins in the Watlington Hoard pursued the full Viking itinerary towards the West Country and back again. Most of these, especially those from the London and Canterbury mints, would have dwelt in the southeast of England and the Thames Valley until quite late in their lifespan.

Summary

The Watlington Hoard was most likely deposited by a Viking in 879 or 880. The English coins contained therein are testimony alike to a considerable logistical effort by the West Saxon and Mercian authorities to control the existing specie and to co-ordinate types and especially minting standards, and to the continued ability of the south-eastern part of England to attract continental silver during the political uncertainties. It would be unduly reductionist (compare Sawyer's (2013: 82) view, cited at the beginning of this essay) to subordinate either the hoard, or the coinage during the period *c.* 875–79 as a whole, to the Viking presence and to the military effort by the West Saxons and Mercians to stem the Viking advances. If anything, it was the during the later period of the earlier Lunettes type (later 860s/early 870s) that English coinage had some of the characteristic hallmarks of an emergency coinage. Perhaps astonishingly, the Watlington Hoard bears witness less to a dramatic monetary effort to counteract the Viking presence, but rather to a normal, if extremely well enacted reform according to a monetary rationale, and to a lively monetisation in a confined part of southern England in spite of, or rather because of, the prevailing military and political uncertainties.

Chapter 9

The Watlington Hoard in Context

John Naylor

The Watlington Hoard is an important find from the perspective of both its contents and its context. It is a significant addition to the corpus of Viking-Age hoards discovered over the last two decades (e.g. Williams 2009; Ager and Williams 2011; Boughton *et al.* 2012). While the overall composition of such hoards is varied, those most immediately comparable to Watlington – mixed hoards such as Cuerdale and the 'Vale of York' – come mostly from northern Britain, and can be coin-dated to the early decades of the 10th-century (Williams 2009: 73–74). In contrast, the Watlington Hoard's proposed deposition date of *c.* 879–80 (see Baker, Chapter 8), is much earlier and places it in a different political context. Buried soon after Guthrum's defeat by Alfred at the Battle of Edington in 878 it lies at the end of the Viking Great Army's lengthy stay in Wessex (see Figure 3.3). This is a very different context to the later northern hoards buried after several decades of Scandinavian settlement, and during the expansion of Wessex rule under Edward the Elder (899–924) and Athelstan (924–39). This chapter focuses on the mid–late 9th-century context of the Watlington Hoard, exploring the evidence for the Viking Great Army in southern Britain and elsewhere to understand how the package of coins and other objects was formed and deposited, and how it (and other contemporary hoards) may relate to the events in play at that time.

The formation of the hoard

The composition of the Watlington Hoard — its mix of local and foreign coinage, complete and fragmented Scandinavian objects and a single fragmented Anglo-Saxon object — fits into the criteria for the classic Viking 'mixed' hoard of the late 9th and 10th centuries (Williams 2009: 76–78). Work on the imported items in the hoard (Kershaw, Chapter 7; Coupland, Chapter 6) has highlighted the Scandinavian character and origins of the metalwork and ingots, with the Carolingian coins pointing to this part of the Watlington package being brought together in the Netherlands and then into Britain en masse. Stray finds of Scandinavian metalwork, ingots and Carolingian coins are also known from across Britain and it is important to consider whether any of this material could have been picked up locally. This section will also consider the Anglo-Saxon coinage and hooked tag within the prism of local circulation and production to understand how much of the hoard, if any, was drawn from the local region.

The Scandinavian metalwork has little parallel locally (Figure 9.1). A broad-band decorated penannular arm-ring described as being found 'near Oxford' was at one time linked to a group of Lunettes type pennies from a possible Viking burial at Hook Norton (Oxfordshire) dating to the 870s but its production is now considered to be later, sometime in the 10th century, and it cannot be associated with the earlier coins (Biddle and Blair 1987: 193; Graham-Campbell

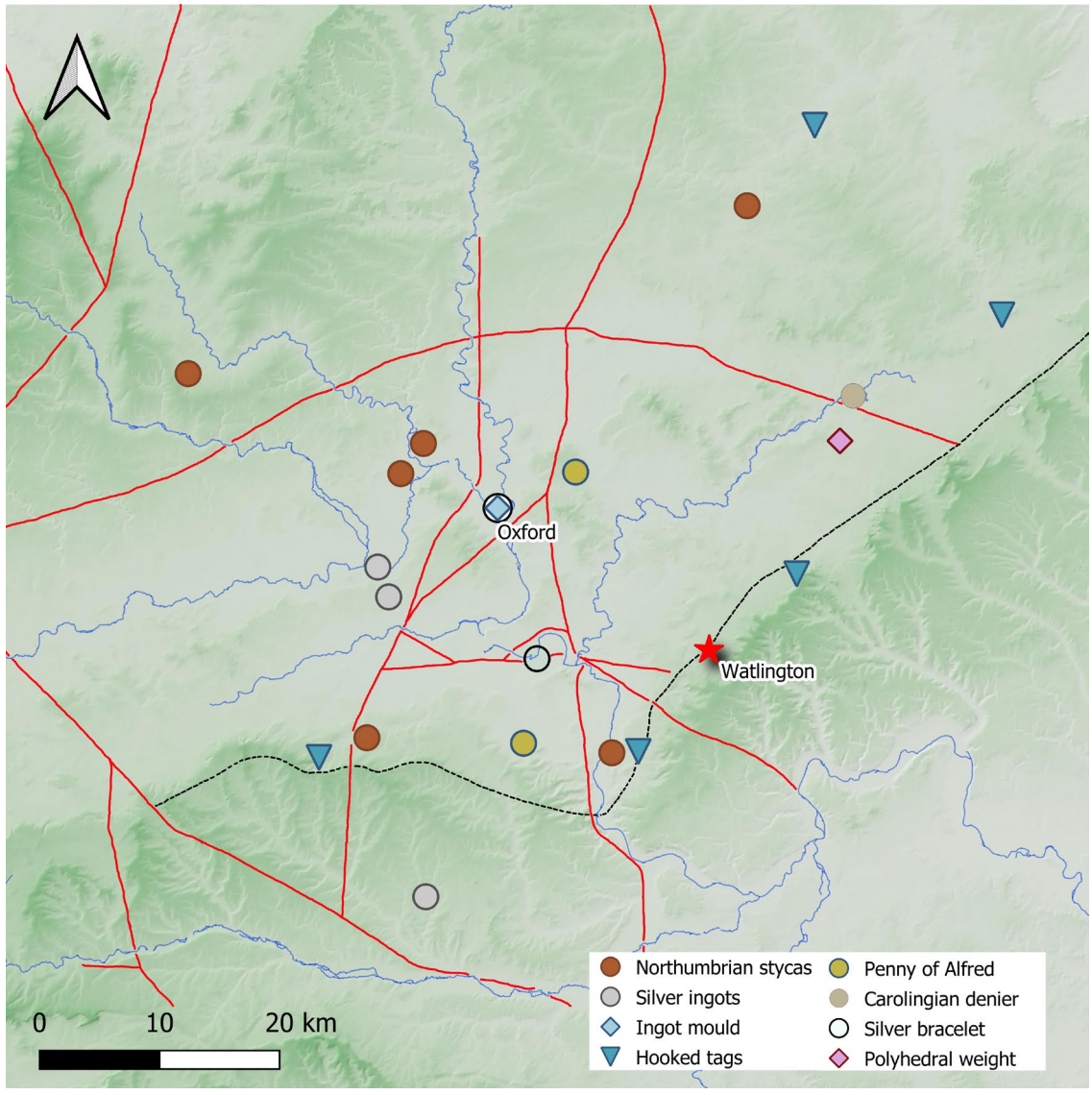


Figure 9.1. Map of the Upper Thames Valley and surrounding area showing findspots of objects discussed in the text. Red lines: routes of Roman roads; black lines: route (approx.) of Icknield Way and Ridgeway.

2001: 116; 2011: 270–71). A second Viking-style arm-ring, from Long Wittenham, Oxfordshire (Ashmolean Museum accession number AN1957.61) is also later in date with its twisted strands and soldered spherical terminals more typical of the 10th century.

The silver ingots in the hoard cannot be diagnostically dated or provenanced on their form alone although Kershaw (Chapter 7) noted that their shape corresponds to that typically seen in southern Scandinavian types and they follow the øre weight standard of *c.* 25g. It is important to note that other examples have been found in Oxfordshire and surrounding counties (Figure 9.1). Three were recorded by the PAS, all declared under the Treasure Act 1996 (Figures 9.2a-c), and are comparable to those found in the Watlington Hoard; one from Winterbourne (West Berkshire) and a second from Fyfield and Tubney (Oxfordshire) are complete, and a cut fragment was found at Northmoor (Oxfordshire); the latter two are from adjacent parishes either side of the River Thames. The weights of those from Winterbourne and Northmoor are

12.9g (half øre) and 8.6g (third øre) respectively, and both are dimpled and show nick marks as seen on the Watlington examples. Such nicking, and the fragmentation of the Northmoor find, would not be out of place in hoards of the later 9th and 10th centuries or from sites associated further north with the Viking Great Army (Hadley and Richards 2018). Their accurate dating is notoriously difficult — they are generally assigned a wide '9th–11th-century' date range — and these three items, while illustrating their local circulation, cannot be closely dated. The potential for a 10th- or 11th-century date is highlighted by a stone ingot mould excavated in the 1950s at the Clarendon Hotel in Cornmarket Street, Oxford, which came from the base of an 11th-century well. This cautions against assuming that ingot finds can be confidently linked to the Viking Great Army in the region, and highlights their potential later local production (Jope 1958: 29, 72; Ashmolean Museum accession number AN1991.55). Similarly, the discovery of a 10th-century Islamic Samanid dirham along the general route of the Icknield Way at Tetsworth (Oxfordshire; PAS WILT-1110F3) shows that connections between east and west, Danelaw and Wessex, continued over time. If this coin, a deliberately cut fragment, had been a 9th-century issue the temptation to link it with the movements of the Viking Great Army would not have been unreasonable. It is an important corrective, showing that while it is plausible that any of the local finds of ingots could be contemporary with the Army's raiding and overwintering in Wessex in the 870s, they may also relate to later connections. The lack of ingots on known 9th-century sites (see Naylor, Chapter 3) at least supports the view that these were not local products in the 870s and that those in the Watlington Hoard were associated with the Viking Great Army. This supports Kershaw's (Chapter 7) interpretation that they entered the country with the Scandinavian metalwork and Carolingian coins.

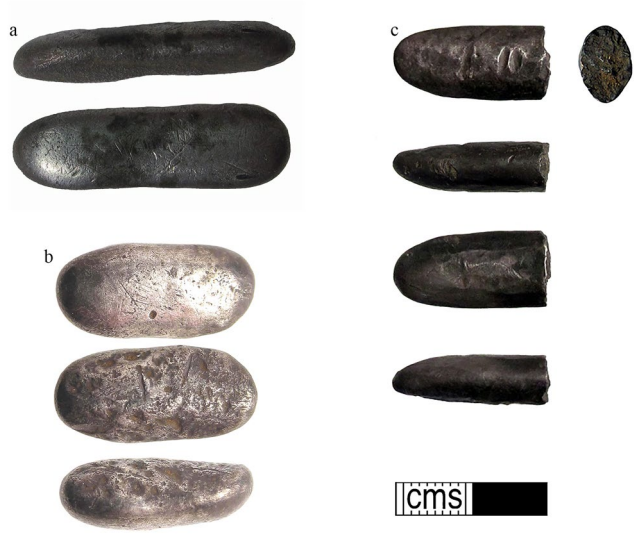


Figure 9.2. Silver ingots found in the Upper Thames Valley area. (a) Winterbourne (West Berkshire; PAS BERK-1EAAE4. (b) Fyfield (Oxfordshire; PAS BERK-A821F2). (c) Northmoor (Oxfordshire; PAS OXON-993704).

The hooked tag fragment and the comparable silver examples recorded by the PAS have been discussed above at length by Kershaw (Chapter 7). Hooked tags in copper-alloy are far more common, however, and many have been found across southern England; they are well-known in the Upper Thames Valley. A number are known from sites producing finds of 8th–9th-century coinage in the region including along the Icknield Way to the east of the Thames (see Naylor, Chapter 3). In terms of ornamentation, cross designs are common motifs as is the use of the 9th-century Trewhiddle style decoration, and these are seen on both copper-alloy and silver examples. Of those recorded by the PAS, the use of the ladder-like decoration within the cross motif appears to be a geographically more restricted style (Figure 9.3), used within the Upper Thames Valley region eastwards into

Figure 9.3. Hooked tags with ladder-like decoration reported to the PAS. (a) Great Munden (Hertfordshire; PAS BH-C1F701). (b) Beachampton (Buckinghamshire; PAS BUC-7D52D5). (c) Childrey (Oxfordshire; PAS WILT-7A7D62). (d) Wallingford area (PAS BERK-126B30). (e) Chinnor (Oxfordshire; OXON-6480CB).

Hertfordshire, and include silver examples from Great Munden (Hertfordshire), Beachampton (Buckinghamshire) and Childrey (Oxfordshire) (Figure 9.3a–c). All are arguably of better workmanship than the Watlington Hoard example. Two copper-alloy hooked tags with a Y-shaped ladder motif, similar to that seen on the Childrey find, were discovered locally. One is a plain type with no additional decoration from the Wallingford area (Figure 9.3d) and the other is from Chinnor (Oxfordshire; Figure 9.3e); a find from Great Billington (Central Bedfordshire; PAS BUC-E824C2), is located further along the Icknield Way to the north-east. This find is decorated in a simplified Trewhiddle style akin to the one in the Watlington Hoard; the overall evidence suggests that the hooked tag in the Watlington Hoard was likely acquired in the Upper Thames Valley or the region immediately to the east.

The coinage in the hoard has little in the way of local precedent with few stray finds of contemporary coinage known (Figure 9.1). A Winchester Style Cross-and-Lozenge type penny of the moneyer Luceman was found at Stanton St John (Oxfordshire; see Appendix 1 no.61) about 25km north-west of Watlington and is stylistically earlier than any of those found in the hoard, all of which belong to the later phases of the Winchester Style (see Naylor, Chapter 5 and 6). Around 35km to the north east along the Icknield Way a small group of three Cross-and-Lozenge type pennies of Ceolwulf II was discovered in Pitstone (Buckinghamshire) in 1996 (Appendix 1 nos 46–48); two others might be added to this, a London Style 6 penny for Alfred (Appendix 1 no.32), and a fragmentary halfpenny of Ceolwulf II reported to the PAS in 2003 (Appendix 1 no.41; Figure 9.4a). Three London Style 4 coins in the Watlington Hoard (**cat. 2.49–51**) share an obverse die link with one of these coins (Appendix 1 no.48; **cat. 2.49–50** are also reverse die duplicates). The other two Pitstone pennies belong to London Style 2 (see Naylor, Chapter 5). This connection between Watlington and Pitstone is of interest, especially given that both were buried along the same long-distance route — the Icknield Way — around the same time.

One PAS-recorded find of Alfred's Horizontal/Two-Line type has been recorded locally from Blewbury (Oxfordshire; Figure 9.4b), around 5km from Wallingford and the crossing of the Thames. A single Carolingian coin is also known from the region, a denier of Louis the Pious (814–40) from the mint at Melle (France) found at Weedon (Buckinghamshire; Figure 9.4c). This may well have circulated into the later 9th century in England and coins of Carolingian rulers struck at mints north of the Alps are regular, if rare, stray finds in this country (Naismith 2011: 155–61). Coins from the northern Italian mints are extremely uncommon in Britain and mid–late 9th-century types deposited within a roughly contemporary timeframe to Watlington are known only from the Cuerdale Hoard of *c.*905–10 (Williams 2011b: 49–50; Coupland, Chapter 6).

Figure 9.4. Examples of coinage of Alfred, Ceolwulf II and the Carolingian Franks found in the broader region: (a) Cross-and-Lozenge halfpenny of Ceolwulf II, Pitstone (Buckinghamshire; PAS BUC-08EE42). (b) Two-Line/Horizontal type of Alfred, Blewbury (Oxfordshire; PAS BERK-D0574D). (c) Denier of Louis the Pious (814–40), Weedon (Buckinghamshire; PAS BUC-C38841). Scale 2:1.

Overall, there is little to suggest that either the coins or non-numismatic silver in the hoard were drawn from locally circulating material with the exception of the hooked tag for which there are local parallels. There is no precedent for the Scandinavian objects, all of which Kershaw (Chapter 7) considered to have entered the country as a single group; Coupland (Chapter 6) considers the two Carolingian coins to have been a part of this group. The evidence from stray finds suggests that the circulation of coinage in the Upper Thames Valley of the 870s was low, and so it seems unlikely that the coins in the Watlington Hoard were simply brought together in a piecemeal way through trading. Rather, the coinage was more likely derived from a store (or stores) of wealth consisting of at least some packages of coins kept together after leaving the mint, as shown in part by the reasonable level of die links among the coins in the hoard (see Baker, Chapter 8, for a counter-argument). Given that the Watlington Hoard's contents are essentially divorced from the regional patterns of circulating material culture, it is important to turn our attention to patterns of hoarding contemporary with the Watlington Hoard in southern England.

Hoarding in late 9th-century southern England

The majority of mid–late 9th-century hoards recovered in southern England are small, comprising low numbers of coins (most contain fewer than 20 coins) which are buried without other objects, or small 'coinless' groups, often silver brooches or strap-ends. Mixed hoards of any size are rare, as are larger coin-only hoards containing more than *c.* 100 coins, such as those from Waterloo Bridge, London dated *c.* 873 or Dorking (Surrey) dated *c.* 862 (Blunt and Dolley 1959: 211–12; Naismith 2016: 12–13; general information on hoard finds also derived from the PAS database, *Treasure Annual Reports* and the *Checklist of Coin Hoards*). Quite how these hoards, composed only of Anglo-Saxon coins or objects, relate to Viking activity — as precaution against threats or as loot taken, for example — is impossible to know from their contents alone, although the likely dates of concealment do correspond to higher levels of Viking raiding, and a peak in the number of hoards deposited around this time has been noted (Bland 2015: 5, figure 4). The distribution of small hoards or purse losses is broad, while the larger coin hoards tend to occur mostly, but not only, in south-east England. Some may have been placed in graves, such as the Hook Norton or Leigh-on-Sea (Essex) finds, both of which might be associated with a Viking presence (Biddle and Blair 1987; Blunt and Dolley 1959: 235–38). Most of these hoards date from the 860s–early 870s and the 890s, very few are contemporary with the Watlington Hoard's deposition. Two, in particular, are relevant, the Pitstone Hoard (discussed above), and the 'near Leominster' hoard from Herefordshire (see below).

There are just five sizeable late 9th-century mixed hoards from southern England other than Watlington (Figure 9.5): Trewhiddle (Cornwall; deposited *c.* 868; found 1774); Gravesend (Kent; deposited *c.* 871; found 1838); Beeston Tor (Staffordshire; deposited *c.* 875; found 1924); Croydon (Surrey; deposited *c.* 872; found 1862); and near Leominster (Herefordshire; deposited *c.* 879–80; found 2015; hereafter Leominster Hoard). Information on all of these finds is compromised as details of the discoveries and contents are incomplete, but a reasonable understanding of each is known (Blunt and Dolley 1959; Naismith 2016; Hoverd *et al.* 2020). The recent find from near Leominster should provide a full and detailed comparative example for which to discuss Watlington but, unfortunately, it went unreported under the Treasure Act 1996 and was recently (late 2019) the subject of a court case with all defendants convicted (Hoverd *et al.* 2020: 47). It is thought that around 300 coins and other objects were discovered but only 30 coins and four objects have so far been recovered. These hopefully give a sense of the overall contents of the hoard although details remain limited. The four recovered objects include a silver ingot, a large gold ring with decorative motifs akin to the Trewhiddle style and a gold arm-ring, one terminal of which is in the form of an animal's head which is biting the other terminal. Neither of these gold objects are considered to be imports. The fourth object, and the earliest object in the Leominster hoard is a 5th–7th-century Frankish gold and crystal pendant. Of the 30 coins recovered, two are foreign issues, one a Frankish denier of Louis the Pious (814–40), the other an early 8th-century Islamic dirham no doubt entering Europe via the Baltic Sea and Scandinavia. It appears likely that both of these will have entered England along with a group of Vikings, and it is possible that this may also be the case for the Frankish gold and crystal pendant although there are parallels known from graves from south-east England (Hoverd *et al.* 2020: 47).

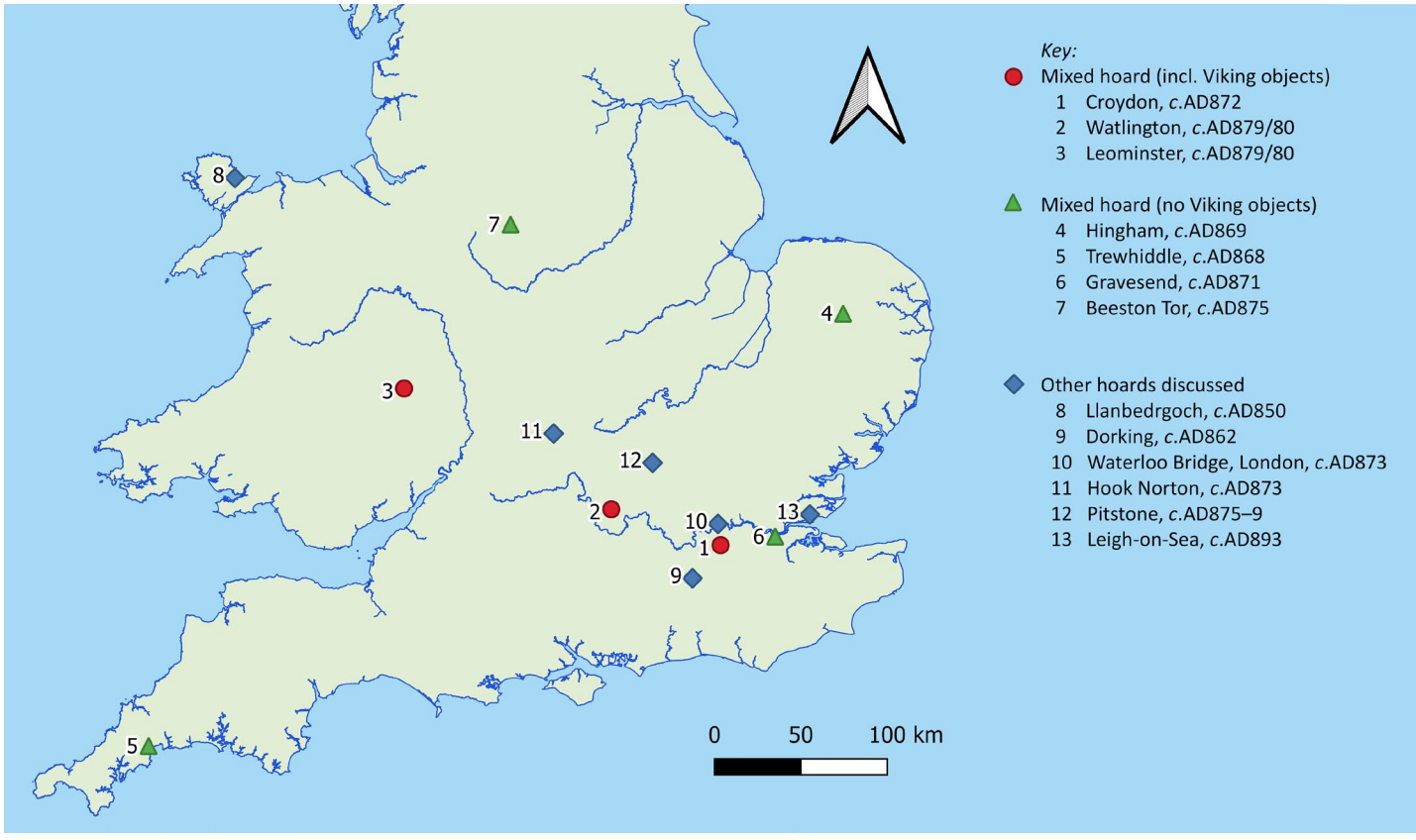


Figure 9.5 Map of southern Britain showing the location of hoards discussed in the text.

The coins from the Leominster Hoard have significant parallels to the Watlington Hoard, although it is a chronologically broader group overall with a Cross-and-Crosslets type penny of Archbishop Wulfred of Canterbury (805–32) the earliest recovered penny. Apart from a Portrait-Quatrefoil penny of Alfred, all other recovered coins appear to belong to the Two Emperors and Cross-and-Lozenge types (Hoverd *et al.* 2020; BBC News 21 Nov 2019). Images released by the British Museum and used in media coverage (e.g. Wilson 2019) do not suggest significant variation from those in the Watlington Hoard. The Two Emperors coins include examples for both Alfred and Ceolwulf II. Those for Ceolwulf II include one struck by the moneyer Dealing with a bust style not seen in the Watlington Hoard — bust group 5 (Naylor, Chapter 5) — which is akin to the Open Cross type of Æthelwulf of Wessex (839–58) and coins of Offa, and further evidence that the Two Emperors type was a larger issue than previously thought. A second example of the Bust Group 3 obverse design with centrally-gathered drapery (cf. **cat. 2.5** (Hereferth) in the Watlington Hoard) was also found in Leominster, this example struck by the moneyer Eadulf. This moneyer also worked for Alfred, striking in the Two Emperors (**cat. 2.64**) and the Cross-and-Lozenge series in the Canterbury Style (Alfred: **cat. 2.81**) and the London Style (Ceolwulf II: **cat. 2.24–25**; Alfred: **cat. 2.126**), although in the Leominster Hoard coin his name has the spelling **EΛDVF**. There is no indication of whether coinage in the name of Archbishop Æthelred of Canterbury was also present in the Leominster Hoard. The few Cross-and-Lozenge type coins seen in the media coverage include examples in

the Canterbury, London and Winchester Styles. A Canterbury Style coin of Alfred, struck by Guthhere, is in Style B/4 and closely matches the design features seen on Watlington **cat. 2.88** with the same bust design on obverse, pellets on each side of the reverse lozenge and in angles of central cross. In the Winchester Style, a coin for Alfred struck by Dunna differs in style to his two coins in the Watlington Hoard (**cat. 2.171–72**) but show similarities to Watlington **cat. 2.174–75** (Heahstan) and **cat. 2.178–79** (Wulfred). There is affinity with coins of Herebald (**cat. 2.134–37**) too, placed in the London Style here. Differences between the two moneyers remain including the start point of the obverse inscription at the shoulder on the coins of Herebald, but the coins of both exhibit extravagant, detailed busts and reverses using crosses or cross-like motifs outside of the lozenge. Two coins of Ceolwulf II are both standard London Style coins (unfortunately only the obverse images were shown), one of bust style 1b die-linked to Watlington **cat. 2.32** (Liafwald), the other bust style 2 and also similar to coins of Liafwald (**cat. 2.39–47**). No coins in the 'West Mercian' Style are present in the small numbers shown from the Leominster Hoard and it is currently impossible to know how representative the released images are of the hoard overall. Like the Watlington Hoard, the latest coin is a Horizontal/Two-Line type of Alfred (Hoverd *et al.* 2020: 51). Despite the small amount of information available, the numismatic similarities between Leominster and Watlington are striking with styles, unrecognised in the pre-Leominster/Watlington corpus, occurring in both and the presence of at least one die-linked coin.

The composition of the Leominster Hoard, or what is known of it, includes local and foreign coinage, precious metal objects and a fragmented silver ingot; the dates of the coins support the interpretation that it is related to the actions of the Viking Great Army in Mercia after the Battle of Edington (Hoverd *et al.* 2020: 48). Its overall similarity with the Watlington Hoard, especially the coinage (including one certain die link) highlights the possibility that the two may be related — perhaps even elements of an originally larger group of objects divided among members of the Viking Great Army. Until further work is carried out on the Leominster Hoard, and hopefully more of its contents recovered, uncertainty remains but it provides significant potential for future research.

Only one other large mixed hoard from the south of England has been convincingly connected directly to the activities of the Viking Great Army. Found in Croydon in 1862, its contents were widely dispersed after discovery. Work by Blunt and Dolley (1959: 222–34) reliably established that the hoard originally contained around 250 coins, of which 185 could be identified with varying degrees of confidence, and eight non-numismatic silver objects including four pieces of hack-silver, three whole ingots and one ingot fragment (six of the pieces are held in the Ashmolean Museum, AN1909.555–561; Figure 9.6). The coinage pre-dates that found in the Watlington or Leominster Hoards and is dominated by Lunettes types of Burgred (94 coins), Æthelred I (25 coins) and Alfred (31 coins) plus a number of East Anglian issues (24 coins) and a coin of the Archbishop of Canterbury (1 coin); of ten identifiable foreign coins, seven are Carolingian (Louis the Pious and Charles the Bald) and three Abbasid dirhams (Naismith 2016: 9). Although the Carolingian coins could have been drawn from local circulation, the Abbasid coinage is most likely to have entered the country with or associated with Viking activity. Its deposition was originally dated to *c.* 875 by Blunt and Dolley (1959: 222), subsequently further pushed back to *c.* 872 on numismatic and historical ground (Brooks and Graham-Campbell 2000:

Figure 9.6 Two complete silver ingots and four items of hacksilver from the Croydon Hoard in the collections of the Ashmolean Museum (AN1909.555–561).

79–83). This was based on the reasonable supposition that the hoard's deposition was likely related to Viking activity given the inclusion of Carolingian and Abbasid coinage, silver ingots and hack-silver alongside the Anglo-Saxon coins, giving the hoard a typical Viking signature. In looking for correlations between the location and known movements of Viking armies, it was clear that after 872 these forces were elsewhere in the country, and that the presence of the Viking Great Army in London in 871–72 probably formed the context for the burial of the hoard at an important estate nearby where, they argue, the Vikings stationed a group to raise food and funds (Brooks and Graham-Campbell 2000: 103–05).

The three other large mixed hoards — Trewhiddle, Gravesend and Beeston Tor — do not contain Scandinavian (or related) objects and they are harder to interpret. Were they buried for safe-keeping by their owners because of a perceived Viking threat, or were they in Viking hands at the time of their deposition (or, indeed, do they have no connection to the Viking Great Army or smaller groups of Vikings at all)? All three contain varying amounts of coinage (552 coins in Gravesend, 115 in Trewhiddle and 49 in Beeston Tor), including issues from Mercia, Wessex and the Archbishops of Canterbury; Gravesend also contains East Anglian coinage (Naismith 2016: 8–9, 13, 22). Carolingian deniers were found in small numbers — two in Trewhiddle, one in Gravesend — but it is possible that these came from the local currency (see below for further discussion), especially given the proximity of their burial place to the coast (Naismith 2016:

13, 22; Graham-Campbell 2011: 16). The objects in each of these hoards are likely to have been made in Britain. The Gravesend Hoard contains a crude silver pendant cross with a marbled glass setting, while Beeston Tor has two silver openwork disc brooches decorated in the Trewhiddle style, a plain gold ring and two copper-alloy rings. The Trewhiddle Hoard has a mixture of secular and ecclesiastical material in silver including a chalice, mounts, strap-ends and a penannular brooch, along with a small gold ingot (Webster 1991: 269–72; Hinton 2005: 113–16). The Trewhiddle Hoard, at least, is considered to be the product of several discrete packages of objects and coins brought together (Webster 1991: 272). The Hingham Hoard (Norfolk; PAS NMS-972E58) is a similar, but smaller, mixed hoard found in 2012 comprising 23 East Anglian coins with six silver objects (four brooches and two strap-ends), the coins dating its concealment to the mid-late 860s, and was possibly related to the Viking conquest of the kingdom in 869.

The circumstances of their burial, whether or not directly related to the Viking Great Army nevertheless reflects the uncertainties of the 860s–870s. The wide range of material now known from Viking winter camps such as Torksey (Lincolnshire) is also important to note here. Large quantities of Anglo-Saxon metalwork have been discovered alongside more typically Viking material illustrating the kinds of loot taken during raiding (Hadley and Richards 2016). Beeston Tor, deposited *c.* 875, may relate to Viking activity in the Midlands region connected to their over-wintering at Repton in 873–74, some 30km to the south-east (Graham-Campbell 2011: 16). The Gravesend Hoard, too, has been linked to over-wintering, this time in London in 871–72, although equally it may represent a merchant's hoard of (mostly) locally-struck coinage (Graham-Campbell 2011: 16–17; Hinton 2005: 116). The Trewhiddle Hoard, buried *c.* 868 and including some church-related pieces is not easily placed (Naismith 2011: 22; Webster 1991: 272). Its deposition is some years prior to, and at some distance from, the documented activity of the Viking Great Army in the south-west peninsula at Exeter in 876–77, make this find an outlier from the main events taking place elsewhere, even if it was the result of now-forgotten Viking activity (Graham-Campbell 2011: 16; see below).

Taken together, these mid–late 9th-century mixed hoards from southern England are comparable in their overall size, all being relatively small-sized packages of coins with only a moderate number of other objects. They present a very different picture in their chronology, abundance and size compared to the nature of Viking-Age hoarding and activity seen in northern Britain. There are no coinless hoards of Viking objects in the south and their dates of deposition place their peak in the 860s–870s rather than the period *c.* 900–30 seen in the north (cf. Williams 2009). This dates them all to the early phases of Viking hoarding in Britain with Watlington and Leominster the latest at around 880. The presence of only very few large mixed hoards from southern Britain is not surprising when considered in the context of the movement of armies around this region, rather than the establishment of broader settlement, even if they over-wintered for several months at a time in a number of locations. In this respect comparisons with the 10th-century hoards from northern Britain are inappropriate, both in terms of context and size. Brooks and Campbell (2000) persuasively argued that the Croydon Hoard can be considered in the context of the movements and over-wintering of the Viking Great Army, and similar arguments have been proposed for both Watlington and Leominster (Williams and Naylor 2016: 28–30; Hoverd *et al.* 2020: 47–48; see below). The three

hoards containing ingots and Viking objects — Watlington, Leominster and Croydon — are similarly sized, each consisting of around 200–300 coins plus a small amount of bullion in the form of jewellery, hack-silver and ingots. Although only modest groups of finds in reality, their comparable size and contents must lead to the conclusion that the Watlington Hoard fits into the general pattern for a large hoard of the 860s–80s of compact, light packages which were easily transported. Any difference in size between it and later hoards such as Cuerdale and the Vale of York reflects the nature of the times in which they were buried and are not an indication that the Watlington Hoard is one of only small or middling proportions.

The Watlington Hoard and the Viking Great Army

Given these likely links between mixed hoards and the movements of the Viking Great Army it is important next to look at the contents of the Watlington Hoard from the perspective of the army itself and its presence in the Upper Thames Valley (and broader) region. Interesting contemporary parallels for the types of objects, and their condition, buried at Watlington comes from some distance away in Lincolnshire, North Yorkshire and the Yorkshire Wolds. A remarkable pattern of finds in these areas has been related to the overwintering and associated activity of the Viking Great Army (Hadley and Richards 2016; 2018). At Torksey, on the River Trent, over 1,500 artefacts have been recovered from an area covering around 55ha, and includes bullion in the form of coins, ingots and hack-silver — consisting of cut down ingots, arm-rings, dirhams, pennies and metalwork — alongside material relating to trading, craftworking and leisure such as weights, tools, casting waste and gaming pieces (Hadley and Richards 2016: 26, 36–54). The site is interpreted as a winter camp dating 872–73 and provides an archaeological 'signature' for the Viking Great Army, the patterns and types of finds different to that seen on contemporary local settlements. That so much material, especially of precious metal, was left behind gives a good indication of the huge amounts of material passing through the hands of those living in the camp. Using this signature, Hadley and Richards (2018: 5–8) have been able to trace activity related to overwintering here and elsewhere including what appears to be the temporary occupation of settlements such as Cottam (East Yorkshire) resulting in the systematic looting and processing of material from the site. The wide distribution of similar material across the region is seen as evidence for the movement and actions of Viking groups as part of, and offshoots from, the Great Army (Hadley and Richards 2018: 8–15).

No comparable archaeological evidence for large-scale Viking winter camps exists where overwintering is documented in Wessex, for example at Exeter (876) or Gloucester (877). This is no doubt a reflection that the raiding and looting in Northumbria/eastern Mercia in the early 870s took place in the political vacuum of Northumbria's defeat in 867 and Mercia's weakened state towards the edge of its territory in Lincolnshire. Throughout the Viking Great Army's travels and raiding around south and south-west England *c.* 875–79, Wessex continued to function — the coinage in the Watlington Hoard is testament to that — even if the situation was precarious at times; it does not appear that the Vikings had the free-for-all that may have occurred in the north Midlands and north. The bullion component at least of this 'winter camp signature', however, is mirrored in hoards such as Watlington, Croydon and Leominster giving an insight into what might be expected for the size and composition of an ordinary package held by a member, or small group, within the Viking Great Army; the hooked tag fragment

in the Watlington Hoard (**cat. 1.22**) is, in this context, a typical component. More broadly, there are some stray finds worth noting. The small number of silver ingots recovered from Oxfordshire, as discussed above, would not be out of keeping with the finds from places such as Torksey, although it can only be dated broadly. A single polyhedral (cubo-octahedral) weight of a type well-known from Torksey was found at Stone, near Aylesbury (Buckinghamshire; Figure 9.7) and is one of only two PAS-recorded examples found outside East Anglia, Lincolnshire or northern England. Its findspot is between those of the Watlington and Pitstone hoards on the Icknield Way. Several examples of 9th-century copper-alloy Northumbrian pennies, often called *stycas*, have also come from Oxfordshire and the Cotswolds (Figure 9.1) – from Wantage (PAS BERK-28E5FE), Cassington (PAS BERK-C7991F), Milton-under-Wychwood (PAS WMID-836844), Crowmarsh (PAS SUR-395C06) and from the excavations at Eynsham Abbey (EMC 2001.0534); another comes from Padbury (Buckinghamshire; PAS BUC-36F5D1; Figure 9.7) further to the north-east towards Buckingham. Stycas are unusual finds outside of Northumbria, the cluster here forming the western end of a thin distribution starting in East Anglia. These finds can be taken as evidence for Viking activity and could relate to the activities and movements of the Viking Great Army from 871 when they were based at Reading, and then from the mid-870s as they attacked Mercia and Wessex. This is well documented, as are several major battles in 871, and the burials at Reading and Sonning (Wokingham) are interpreted as Viking and have been related to this earlier period of activity (Yorke 1995: 109–110; Graham-Campbell 2001: 115). A later date cannot be ruled out (see above) which might reflect contacts, probably of an economic nature, with East Anglian Vikings from the 880s onwards. This material can, then, be seen from both a pre- and post-Edington perspective, from the raiding and the settlement phases of the late 9th–early 10th centuries but it is likely that at least some belongs to the mid–late 870s.

This thin spread of finds is repeated across south-west England (Figure 9.8) — although only a single Northumbrian penny is known, from the Isle of Wight (PAS IOW-16D9EF) — and has been studied in some detail by Kershaw (2016), focusing on the metalwork finds. The following summarises her work, taking into account a number of recent finds, and explores the evidence from coin finds in more detail. The overall distribution points to a broad spread of Viking-related activity with a generally high incidence of finds at or near the coast and in areas of documented raiding and encampment. The most extensive evidence comes from Dorset: Wareham was attacked and occupied in 875–76, and raids into the countryside continued until Alfred paid tribute and they moved off to Devon (Yorke 1995: 110–111). Four finds of lead weights inlaid with fragments of decorated metalwork or coins are recorded from the county: two from Kingston incorporating Lunettes type pennies of the late

Figure 9.7 Top: a polyhedral weight of a type associated with Viking activity from Stone (Buckinghamshire; PAS BUC-F89F17). Bottom: a copper-alloy Northumbrian penny (or styca) from Padbury (Buckinghamshire; PAS BUC-36F5D1). Scale 2:1.

860s–early 870s (Kershaw 2016: 97); and two incorporating fragments of decorated metalwork, one from near Weymouth (PAS BH-1DA0A5), and the other from Tarrant Hinton (PAS DOR-D1CD4E). All are types typically associated with Viking activity. A possible cut-down inlay for a weight was discovered at Winterbourne Zelston (PAS SOMDOR1026; Kershaw 2016: 97), and a silver ring from Shaftesbury (Dorset; PAS DENO-9F9344), around 35km north of Wareham, probably dates from the late 9th to early 10th century (Kershaw 2016: 94). Further west along the coast, a gold ingot of typically Viking form was found just outside Bridport (Dorset) at Loders (PAS SOM-E7F945) and a silver ring comes from Sandy Cove near Sidmouth (Devon) although this can be dated only very broadly to the late 9th–12th centuries (Kershaw 2016: 93).

At Exeter, the location of an encampment in 876, two finds from excavations in the city are of interest (Rippon 2021: 225–26). One, a silver penny of Archbishop Ceolnoth (833–70), is paralleled in the region by the seven examples in the Trewhiddle Hoard and four in the Sevington (Wiltshire) Hoard of *c.* 850 (Naismith 2011: 68-69, 78-79), and a base metal forgery of a gold *solidus* imitating an issue of Louis the Pious (814–40) was discovered at Exe Bridge (Rippon 2021: 226). Generally considered to have been struck in Frisia, and Coupland (2016: 265–66) has recently argued that they were produced by Scandinavians who had settled in the area rather than by the Frisians themselves and that their distribution in the Low Countries, France and Britain reflects Viking activity; other examples of these coins have been found in the south-west region near Salisbury PAS WILT-A50F43) and from Castle Eaton (both Wiltshire; EMC 2020.0384). To the south of Exeter a cut ingot was found on the estuary of the River Teign at Bishopsteignton (Devon; PAS PUBLIC-028C00), and its weight at 11.24g is just under half an øre. At Goodrington (Devon), on the south side of Torbay, *c.* 35km south along the coast from Exeter, Kershaw (2016: 93) noted the discovery of a gold annular arm-ring of a type produced from *c.* 850 onwards.

To the north, the Bristol Channel coast was repeatedly attacked in the 830s and 840s (Yorke 1995: 107–08) and there are finds of silver ingots at Carhampton (PAS SOM-50E721), raided in 836 and 843, and at Cheddar (PAS GLO-4F7DB2) along with an inlaid lead weight from Ilchester (all Somerset; PAS SOMDOR-9FE618) and a silver ingot from Over Compton (Dorset; Kershaw 2016: 96), both some way from the coast but around the eastern edges of the Somerset Levels.

Carolingian deniers are harder to assess in relation to Viking activity. They are regular elements in Viking hoards, probably as a result of raiding, but finds may also simply reflect long-standing trading contacts with the Continent (Kershaw 2016: 95; Coupland 2015: 83). A number of finds are known from south-west England (Figure 9.8) including an interesting cluster of finds in western Cornwall, and it is useful to discuss these in more detail. Five stray finds have been recorded across the area from the Lizard to Land's End, in addition to the examples in the Trewhiddle Hoard and another from mid Cornwall at St Winnow (Penhallurick 2010: 255). Four of the five western finds, plus that from St Winnow, are of the same type, the *Karolus Monogram*, struck at the mint at Melle (France), *c.* 75km east of the Bay of Biscay. These coins were issued from 793–814 by Charlemagne (768–814) and 840–*c.* 864 by Charles the Bald (840–77) and some later types to around 925, the style and metallurgy so consistent that issues from either ruler cannot generally be told apart outside of closely-datable hoards (Coupland 2015: 61–77). Relatively few finds of this type are recorded from England, Naismith's (2011:

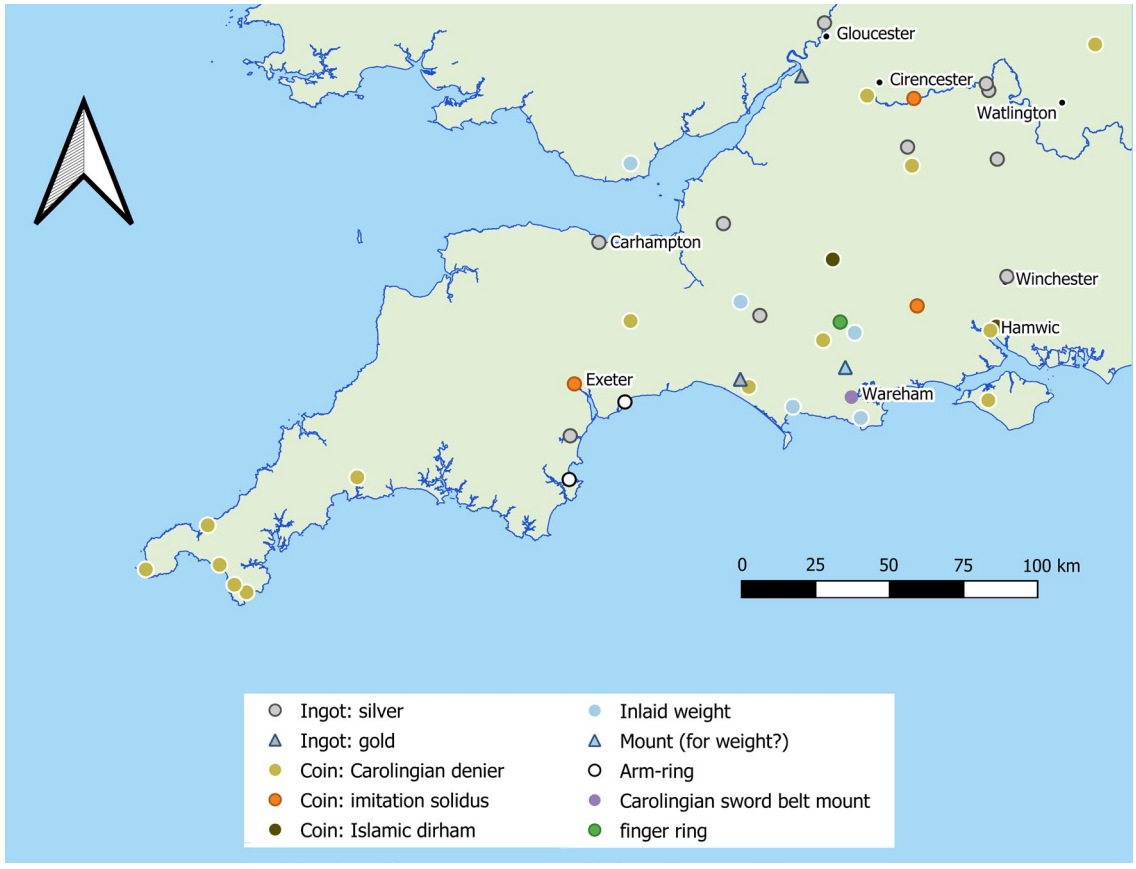


Figure 9.8 Map showing the distribution of finds in south-west England typically associated with the Viking activity and locations mentioned in the text.

159–60) corpus listing just seven coins, including one from Devon (Naismith 2011: 159) but none of the Cornish examples which are more recent discoveries reported to the PAS and EMC. That such a cluster has been found in western Cornwall, an area where no other stray finds of 8th–10th-century coinage are known, is of note and it is important to consider whether this reflects Viking activity or trading contacts. Viking activity in Cornwall is well known, the Cornish and Vikings fought together in 838 against Wessex, and it is likely that the English Channel was also a potential route for Vikings raiding into the Irish Sea from the 830s (Yorke 1995: 108; Price 2020: 340). Such a scenario might have brought with it foreign coinage, loot or tribute picked up during the raiding of the Continent in the 820s and 830s. However, if that was the case it would be more likely, perhaps, to also see coins from other mints reflecting the extent of those raids. That the Cornish assemblage is predominantly restricted to a type which was struck at the Frankish mint closest to the Atlantic sea-lanes from western France to western Britain ties in well with Blackburn's (2007b: 125) comments noting the presence of Melle-minted coins along this route north into the Irish Sea. These more recent Cornish finds suggests it is likely that these coins represent 9th-century trading contacts rather than loot, continuing the western trade routes seen through pottery finds in earlier centuries (e.g. Campbell 2007). Further support comes in the broader corpus, the finds of Carolingian from further east are almost entirely different types, and from a wide range of mints, suggesting that these coins from the south-western tip of the country belong to this different network of communication. The more easterly finds could equate to cross-Channel connections or Viking

activity, the two finds from Dorset – denier of Louis the Pious from Turnworth (EMC 2004.0244) and Lothar II (855–69) from Pin Knoll (Naismith 2011: 161) – both appearing within broadly spread but convincing groups of Viking-related objects.

Islamic coinage potentially lost or deposited up to the late 870s in south-west England is known only from an Abbasid dirham struck in 802 found at Monkton Deverill (Wiltshire; Kershaw 2016: 95). An example excavated at *Hamwic* was probably deposited before 850 and all other finds from the region are issues from the 890s or later (Naismith 2005).

Overall, none of the finds from south-west England can, individually, be taken as specific evidence for the Viking Great Army in the region but, as in the Upper Thames Valley, together they illustrate a general spread of material associated with Viking activity, some coinciding with documented raiding or encampment of the 870s. The steadily increasing numbers of finds from the broad area around Wareham and Exeter are the best candidates for illustrating this activity related to the Viking Great Army rather than later contacts, but the coin finds from west Cornwall cannot be considered as good candidates, more likely reflecting pre-existing links with western France. Elsewhere finds are too sparse to interpret with any confidence although those in the southern Bristol Channel area of Somerset and north-west Dorset at least illustrate Viking contact of some form.

The composition and organisation of the Viking Great Army can also be viewed through the prism of the Watlington Hoard itself. The dating of the two Carolingian deniers is crucial here (Coupland, Chapter 6). These two coins, both struck in northern Italy at Pavia, date to the mid-870s, the issue of Charles the Bald to 875–7 (**cat. 2.203**), near contemporary with the hoard's date of burial around 879–80. At the point when this coin was struck, the Viking Great Army was already raiding and overwintering across Wessex. These objects could only have entered the country a little before Guthrum's defeat at Edington in 878. That both coins are whole and have not been pecked suggests that neither circulated as bullion and it is reasonable to consider that their final owner may have already had these coins when they came to Britain; therefore, a person, or group, who only joined the Viking Great Army at a late stage. Such a scenario fits well with the idea of the basic unit of warriors as a kind of 'brotherhood', known as a *lið*: a group numbering anything from a few dozen to a couple of hundred individuals, pledging allegiance to a leader (Raffield 2016; Price 2020: 313). At times, these *lið* came together into a relatively loosely organised structure made up from co-operating groups — a situation reflected in the data from Lincolnshire and East Yorkshire — with evidence that the composition of the Viking Great Army was open to constant change and refreshment as groups joined or left (Raffield 2016: 324–26; Hadley and Richards 2018).

This loose configuration of the Viking Great Army throughout a period of raiding fits well into the chronology of the imported material in the Watlington Hoard. As Coupland (Chapter 6) argued, the Carolingian coins were likely brought north from Italy to the Netherlands before their journey west to Britain. A part of this region known as West Frisia, approximating to the western coastal areas and inland to Dorestad (Besteman 2006–07: figure 1) was under Scandinavian control during the mid–late 9th century; it may have been from here that the coins and Scandinavian material formed a package of imported material. While we cannot know if this was in the possession of

a Scandinavian settler in West Frisia or someone passing through, the evidence from the region is instructive, if not particularly extensive. Stray finds of coins (Carolingian and Arabic), some fragmented, hoards and a stray find of an ingot imply a level of activity across the northern parts of the modern Dutch provinces of North Holland and Friesland (Besteman 2006–07: 72–74, figure 18). Two hoards — Westerklief I and Westerklief II from Wierengen, North Holland — are crucial. Deposited around 880, Westerklief II contains just under 500g of silver comprising 134 coins (Carolingian and Arabic), including both whole and fragmented examples plus an imitation coin brooch, a single complete ingot and 23 pieces of hack-silver made from ingots and other objects (Besteman 2006–07: 72–74). Westerklief I is earlier, dated around 850, and contains mostly whole objects including ingots, penannular arm-rings, an arm-ring and neck-ring alongside Carolingian coinage and ornaments made from dirhams (Coupland 2011: 120–21). The ingots in both hoards parallel those in hoards like Watlington and Croydon, and are rare finds from Continental Europe. They are thought to relate to Viking movements from southern Scandinavia. The difference is in the levels of fragmentation seen in the two Dutch hoards and, assuming each is representative of its time, the later hoard contains objects mostly fragmented into hack-silver (Coupland 2011: 120–21). That the Watlington Hoard contains non-numismatic silver which is mostly whole — the ingots and arm-rings — supports the proposition that these were acquisitions which had only recently come from southern Scandinavia. The hack-silver neck- and arm-ring fragments in the Watlington Hoard also derive from Scandinavian objects but the neck-rings also have approximate parallels within Westerklief II (see Besteman 2006–07: figure 6.2 no 19). Perhaps these hack-silver fragments were acquired along with the Carolingian coins. The important point, however, is that the evidence from the northern Netherlands suggests that the jewellery and ingots in Watlington did not circulate for long in West Frisia, and the person (or persons) who joined the Viking Great Army travelled to England from southern Scandinavia via that region.

Motives for the deposition of the Watlington Hoard

In this final section it is important to consider the potential motives behind the burial of the package near Watlington. Was it buried with the intention to recover or as a permanent deposit? The latter ties in with the long-held views of archaeologists that many prehistoric hoards are permanent deposits best explained through the prism of ritual and religion rather than as being buried for safe-keeping (e.g. Bradley 2017; Haselgrove 2015). Traditionally, medieval hoards are considered to be deposits temporarily buried for safe-keeping with every intention to recover at a later date. However, over the last decade or so the complex nature of deposition, and the motivation for the concealment of an object, or a group of objects, has been explored in more detail for material of Roman and medieval dates. This has included the deposition of varied material culture including animal bones, ceramic, metalwork and weaponry on settlements and in natural features including rivers (e.g. Hamerow 2006; Thomas 2008; Naylor 2015).

The interpretation of Viking-Age precious metal hoards has primarily focused on economic explanations, and the transition from bullion to coin-based economies in the Danelaw of the early–mid 10th century, including for safe-keeping in times of warfare (e.g. Williams 2009). The burial of hoards is assumed to have more likely taken place with the intention to recover than

as deliberate permanent deposits. Many of the elements of Viking-Age hoards support such a conclusion with their contents considered to be primarily economic items, including objects such as arm-rings belonging to prestige and bullion economies, their conversion into hack-silver illustrating these parallel dynamics. Viking-Age hoards can contain all or a mixture of coins (local and foreign), whole objects, fragmented objects/ hack-silver and ingots, some of which may be pecked or nicked (Williams 2009: 76–78; see Kershaw, Chapter 7, for discussion of this phenomena in the Watlington Hoard). The use of hack-silver and the weight standards seen on many ingots, including those in the Watlington Hoard, also points to an economic character and that their overall composition can be best interpreted within the notion of a bullion-based economy. Ritual deposition for such items is considered inappropriate (Williams 2009: 82). Exceptions have been noted in some Irish hoards by Graham-Campbell and Sheehan (2009), with many 10th–11th-century hoards or precious metal deposits in some way associated with watery or liminal places — including places where recovery would be extremely difficult — and that this ritual deposition of whole objects, including those made from gold may be more common than generally accepted. Such potentially ritual deposits appear to be a special category, and mixed hoards or those containing hack-silver and/ or ingots are more common in crannogs and settlement locations, suggesting an important differentiation in composition between those of economic and non-economic character (Graham-Campbell and Sheehan 2009: 87–88).

This differentiation is important and is highlighted again by the evidence described above from places like the winter camp at Torksey where the primary economic role of such objects is obvious (Hadley and Richards 2016; 2018). So, where does this leave us regarding the status of the Watlington Hoard? Its burial in the countryside in the Watlington area of Oxfordshire is, regardless of its exact location, not in a typically 'ritual' location, e.g. near/ in water or in the abandonment levels of a structure or settlement feature; once located its retrieval would be easily achieved. The mixed nature of the hoard and the inclusion of both hack-metal (silver and gold) and ingots, some of which are nicked, places the Watlington Hoard within an economic rather than ritual arena, and its burial is most securely interpreted as a bullion hoard concealed with the intention to recover.

Discussion

This chapter has explored the manner in which the package of objects which formed the Watlington Hoard came together, and how this material can be used to better understand the Viking Great Army. With the exception of the fragmented silver hooked tag it is highly unlikely that any of the non-coin elements or either of the Carolingian coins were taken from circulation in this country but were instead brought together as a group elsewhere, probably in Scandinavia and the Netherlands, entering the country with a person or group heading to join with the Viking Great Army. It is also unlikely that the coinage was acquired through general economic transactions in the Upper Thames Valley, or more broadly across Wessex or Mercia given the dearth of comparable stray finds from the area. The runs of die-linked coins in the hoard might suggest larger transactions or the receipt of tribute and this will be discussed further below. First, it will be instructive to consider how the two groups – coins and other objects – came together prior to their burial.

In their reappraisal of the Croydon Hoard, Brooks and Graham-Campbell (2000: 80) relate that in 871–72 both Alfred and Burgred had paid large sums in tribute to the Viking armies to move elsewhere, and Yorke (1995: 110–11) argued that the Viking Great Army were paid tribute to leave Wareham in 876. This was not an uncommon occurrence given the documented references to huge sums paid out on the Continent, one example being 4,000 pounds of silver paid to Vikings raiding the Seine valley in France (Hinton 2005: 116). The content of the payment made by Burgred was said to have been provided by Mercian lords, many living far from London (Brooks and Graham-Campbell 2000: 80). It is entirely plausible that a similar situation led to the Watlington Hoard, and the coins could have originated from stores of wealth held by the nobility or the Wessex/Mercian royal courts. Indeed, it is possible that it came from Alfred himself after the Battle of Edington in 878 as part of the general arena of early-medieval peace-making. This was described in the *Anglo-Saxon Chronicle* as a decisive victory for Alfred and his forces resulting in total Viking surrender. As part of the peace agreement, they gave hostages and oaths to leave the kingdom, the Viking leader Guthrum was baptised and 'he [Guthrum] was twelve days with the king, and he [Alfred] honoured him and his companions greatly with gifts' (*ASC* 878; Whitelock *et al* 1961: 49). The Viking Great Army then over-wintered at Cirencester in 878–79 prior their departure for East Anglia. This occurred before the later treaty between the two kings which set the boundaries between Wessex and the Danelaw, and probably dates to the 880s (Kershaw 2000). A payment for peace — be that a 'gift' or tribute payment — does not seem unrealistic and the *Anglo-Saxon Chronicle* entry does not suggest that the Viking Great Army was necessarily enormously diminished in size by its defeat at Edington, the situation recently described as the two sides having 'fought each other to a standstill' (Price 2020: 349). This makes the discovery of the Leominster Hoard very interesting given the similarities between the coin types within it and in the Watlington Hoard; it is extremely sad that only a small portion has been recovered. That there is at least one die link between the two hoards hardly proves the two hoards were originally part of the same payment or gift but it nevertheless highlights the connections between them, and the possible fate of the Viking Great Army post-Edington. We know that Guthrum headed to East Anglia sometime in 879 but it is likely that other groups within the army dispersed and moved elsewhere during this period too. Some may have headed towards Wales and the Irish Sea to which the Leominster area may have been on the westward route. Following the Roman road network from Wiltshire, the easiest place to cross the River Severn would have been at Gloucester after which the extant Roman road network would lead north towards Chester and the Irish Sea, a route potentially passing Leominster; it is unlikely groups of Vikings would have headed back into Wessex, the only other reasonable route to the coast and the Irish Sea. There is evidence from Wales of a Viking presence from the mid-9th century — potential Viking rule in North Wales from the 870s until the early 10th century has been speculated — including both references to raiding and archaeological evidence in the form of stray finds and hoards. The fortified settlement at Llanbedrgoch (Anglesey) provides the most important evidence, with excavations uncovering finds including silver ingots and hack-silver, metalworking waste and a coin hoard dating to the 850s (Redknap 2009: 29–30, 35–7, figure 4.1).

The die links between the coins in the Watlington Hoard and the small Pitstone Hoard also suggest that these may have once formed part of the same package. One problem with this scenario lies in the chronology of the coinage in the Watlington Hoard. There is no issue regarding the Two Emperors and Cross-and-Lozenge pennies within the remits of a package of coins dating to the time of the Battle of Edington, but the Horizontal/Two-Line type penny was not introduced until around *c.* 880, perhaps a little earlier (Naismith 2017: 170–72). As such we have to consider whether the Anglo-Saxon coins in the hoard were brought together all at once or if some were added at a later date. That only a single later coin is present in the Watlington Hoard fits nicely with the idea that it is a later addition — just prior to the period in which it was buried — to a larger package of material already brought together. An alternative is, of course, that the Watlington Hoard coins, and perhaps by inference also those in the Pitstone and Leominster hoards, are not part of any payment made by Alfred but were loot or other payment taken by the Viking Great Army as it moved around prior to Edington. However, if this were the case, with the Vikings raiding deep into Wessex in 875–77 (Figure 3.3), a greater proportion of Winchester Style coins might be expected whereas this style represents only a minor element in the Watlington Hoard (**cat. 2.169–79**), and even lower proportionally than that seen in the non-Watlington corpus (Figure 6.6). A greater range of types might be expected too, including early Reform types (see Baker, Chapter 8 for discussion of these) and perhaps even some of the older Lunettes type pennies. The lack of pecking on the coins in the Watlington Hoard — in contrast to the evidence from some of the other objects (Kershaw, Chapter 7) — supports the possibility that the coinage only entered Viking possession shortly before its deposition and that it had not passed through many hands previously. How this package of coins and objects then ended up in the Watlington area is the next question that needs to be addressed.

In the short book published to coincide with the Ashmolean Museum's acquisition project for the hoard (Williams and Naylor 2016), it was suggested that after over-wintering at Cirencester in 878–79, the Viking Great Army journeyed to East Anglia, for which there were two potential routes, both based on Roman roads. One is via Akeman Street crossing the Icknield Way in the Aylesbury area, the other via Ermine Street (Williams and Naylor 2016: 30). This latter route would provide the only reasonable way for travel via the Watlington area without a detour. Ermine Street runs south-east from Cirencester and meets the Ridgeway/ Icknield Way just south of the Roman small town at Wanborough near Swindon. From here, the route moves east, crossing the River Thames at Goring or Wallingford, around 10km from Watlington, probably via a ford rather than a bridge at this time (Grayson 2010). From here the army could travel eastwards along the Icknield Way into East Anglia.

Depending upon the size of the group moving across this landscape, the crossing of the River Thames may have taken some time and there would have been the inevitable need to stop, camp and re-stock along the way. Brooks and Graham-Campbell (2000: 85–86) argued that an over-wintering Viking army may have used the English estate system as a way to raise food and money, and that the deposition of the Croydon Hoard could be related to a Viking presence on the Croydon estate in 872. Although the Viking army was technically in retreat to East Anglia at the time the Watlington Hoard was deposited, its subsistence needs would still have to be met, and this may have been the point at which the hoard was buried perhaps by a person or

group stationed in the area. We have seen (Naylor, Chapter 3; Lavelle, Chapter 4) that the lands around Watlington form parts of the larger estate of *Readonora* controlled by the royal manor at Benson and this would be an ideal location, just after the river crossing, to stop and regroup. If there had been a Viking presence at *Readonora* in 879–80 in order to prepare supplies, it is possible that the hoard was buried for safe-keeping during this preparatory period and, for some reason, it was never retrieved when the Viking Great Army moved on (see also Lavelle, Chapter 4, for discussion of the possible exchange of hostages on the estate post-Edington). It may be, of course, that the Viking army was in no position to demand tribute on these Wessex-controlled lands and the hoard represents payment from the army to the estate. The findspot of the hoard does not help with no traces of structures or other settlement features found during the small excavation carried out to recover the hoard (Corke, section 2.2), so it appears to be have been buried away from any settlement focus (although not publicly available its exact location is recorded and known to the author; see introduction to Chapter 2 for discussion of the findspot).

The final ownership of the Watlington Hoard immediately prior to its burial is, of course, impossible to know but it is entirely reasonable to consider that it was in Viking hands both when the constituent parts were brought together — one from the Continent and one from southern England — and when it was buried. The 201 pennies likely belonged to a larger overall collection of material divided up among groups within the Viking Great Army and this might be traced back to peace negotiations after the Battle of Edington, and it is not inconceivable that connections between Watlington and the Pitstone and Leominster hoards in the form of the die-linking of a number of coins point to a common origin. As the first large Viking hoard to be discovered in the Upper Thames Valley region, and one buried at a pivotal moment in Britain's history, the Watlington Hoard is of obvious importance and significance. The analyses here have shown that it should not be considered an odd, atypical outlier, but rather considered as a part of a wider corpus of material discovered across central and south-west Britain. Together the finds build a picture of Viking activity, and interactions — peaceful or otherwise — with local populations, which took place across the middle and later decades of the 9th century and extending into the early 10th.

Catalogue 1

The non-numismatic objects

Compiled and edited by Eleanor Standley

The catalogue entries below are largely based on the 'Report on potential Treasure' written as part of the Treasure process (Ager *et al.* 2016), with contributions from Jane Kershaw and Eleanor Standley. Thanks are also due to James Graham-Campbell for discussing the non-numismatic objects with Barry Ager during the preparation of aforementioned report. Ashmolean Museum accession numbers are included in the entries.

The conservation of the non-numismatic objects is discussed by Philippa Pierce and Alexander Baldwin (see sections in Chapter 2); the objects and their likely origins are discussed in detail by Jane Kershaw (Chapter 7); and the significance of the hoard as a whole is considered by John Naylor in the final discussion chapter (Chapter 9).

During early investigations small organic material fragments were identified. At the time they were considered to perhaps be fragments of wooden strips (eight in total, between 4mm and 30mm in length), and a tiny piece of organic material which was very tentatively identified as leather (no measurements; Ager *et al.* 2016: 2.C and D). During further conservation work these were all considered to be natural, and not artefacts (see Pierce, Chapter 2). However, the wood has been retained in the Heberden Coin Room, Ashmolean Museum, for future reference.

The Silver

The total weight of the non-numismatic silver objects in the Watlington Hoard is 772.29g. Surface metal analysis conducted at the British Museum during the Treasure process (under Treasure Act 1996) indicated an approximate silver content for a selection of the items; see Table 10.1 for the silver objects (Ager *et al.* 2016). The approximate metal content of the gold fragment (**cat. 1.23**) is 72% gold and 26% silver, with 2% copper (Ager *et al.* 2016).

A note on the catalogue images (Plates 1.1–1.4)

The final stages of the production of this book were undertaken during, and affected by, the COVID-19 pandemic in 2020–21. It was our intention to produce high quality images of all of the objects, each entry in the catalogue accompanied by multiple views of the object. However, by the time this was scheduled to take place the Ashmolean Museum was closed and we were unable to access the hoard. As a result we have used images that had been taken previously during other work on the hoard. Working shots of the ingots and neck ring AN2017.7 were provided by the Ashmolean's Conservation department, taken during the course of their work on the hoard; these images have been cleaned, edited and scaled as necessary showing a

range of views of each object. The other images used in the catalogue were photographed by the Ashmolean's Photo Studio. These were intended as high quality artistic shots and these were cleaned and scaled as closely as possible to actual size (unless otherwise stated) but are otherwise unedited.

All photographic images © Ashmolean Museum, University of Oxford.

Table 10.1 The surface silver content of the silver jewellery and two of the ingots.

Cat. no.	Object	Approximate silver content of surface metal
1.1	Ingot	94%
1.2	Ingot	95%
1.16	Penannular arm-ring	98%
1.17	Broad-band arm-ring fragment	97%
1.18	Ovoid arm-ring	97%
1.19	Ovoid arm-ring	95%
1.20	Neck-ring terminal	96%
1.21	Neck-ring terminal	96%

The compositional analyses were carried out by the British Museum's Department of Scientific Research using a bench Bruker Artax X ray fluorescence (XRF) spectrometer with a molybdenum target X-ray tube rated up to 40 W and operated at 50 kV and 500 μA, with a counting time of 200 seconds. The analyses were carried out using a 0.65 mm diameter collimator.

Ingots (Plates 1.1–1.2)

1.1 Bar-shaped ingot of triangular section, thicker at one end; two testing nicks on one angle and one on the apex. Length, 95.2mm; width, 14.5mm (max); thickness, 13.5mm (max); weight, 97.67g. AN2017.8

1.2 Bar ingot of irregular shape and rounded triangular section shelving to lower end; pitted under-surface; six testing nicks on one angle, three testing nicks on the opposite angle. Length, 53.6mm; width, 14.0mm (max); thickness, 13.3mm (max); weight, 44.92g. Figure 10.1. AN2017.9

1.3 Bar-shaped ingot of oval section. Length, 45.6mm; width, 10.0mm (max); thickness, 6.3mm (max); weight, 19.9g. AN2017.10

1.4 Bar-shaped ingot of rounded triangular section flattening slightly towards one end, which is more pitted. Length, 83.8mm; width, 10.2mm (max); thickness, 9.7mm (max); weight, 52.1g. AN2017.11

PLATE 1.1

PLATE 1.2

Figure 10.1. Silver ingot with multiple testing-nicks (cat. 1.2).

1.5 Bar-shaped ingot of rounded triangular section, rounded at one end, the other more square and wider; one testing nick at the wider end. Length, 54.8mm; width, 9.3mm (max); thickness, 7.8mm (max); weight, 24.4g. AN2017.12

1.6 Short bar-shaped ingot of rounded sub-triangular section and thinner at one end; casting flaw on upper surface. Length, 35.4mm; width, 10.0mm (max); thickness, 8.4mm (max); weight 17.9g. AN2017.13

1.7 Bar-shaped ingot of D-shaped section. Length, 43.0mm; width, 9.9mm (max); thickness, 6.2mm (max); weight, 17.5g. AN2017.14

1.8 Bar-shaped ingot of ovoid section; one end pointed, with a small spur on one side: such spurs form when silver is poured into the mould onto silver which has already started to cool. Length, 51.0mm; width, 8.2mm (max); thickness, 5.3mm (max); weight, 14.6g. AN2017.15

1.9 Bar-shaped ingot of D-shaped section, tapering and lower at one end; one testing nick in centre of underside. Length, 94.1mm; width, 11.5mm (max); thickness, 8.1mm; weight, 55.8g. AN2017.16

1.10 Bar-shaped ingot of rounded triangular section, slightly flatter and wider at one end. Length, 79.2mm; width, 8.8mm (max); thickness, 8.3mm (max); weight, 35.2g. AN2017.17

1.11 Bar-shaped ingot of oval section; old transverse crack and pit on underside and zigzag scar on the upper surface caused by the silver contracting during cooling as it was exposed to the open air when in the mould; one testing nick on one side. Length, 75.7mm; width, 12.7mm (max); thickness, 6.8mm; weight, 48.5g. AN2017.18

1.12 Bar-shaped ingot of D-shaped section, narrower at one end; pit on upper surface near the wider end. Length, 71.0mm; width, 13.0mm (max); thickness, 8.5mm (max); weight, 48.9g. AN2017.19

1.13 Bar-shaped ingot of ovoid section, bent in the middle probably from agricultural activity (this ingot was found in the ploughsoil); the underside is very pitted and there are three diagonal abrasions across the centre of the upper surface and lengthwise scoring at one end; two testing nicks between cracks on one side. Length, 80.6mm; width, 12.6mm (max); thickness, 7.7mm (max); weight, 54.1g. AN2017.20

1.14 Bar-shaped ingot of D-shaped section. Length, 50.5mm; width, 9.8mm (max); thickness, 5.9mm; weight, 19.7g. AN2017.21

1.15 Bar-shaped ingot of D-shaped section; very pitted underside. Length, 84.3mm; width, 12.3mm (max); thickness, 7.3mm (max); weight, 54.4g. AN2017.22

Arm-rings

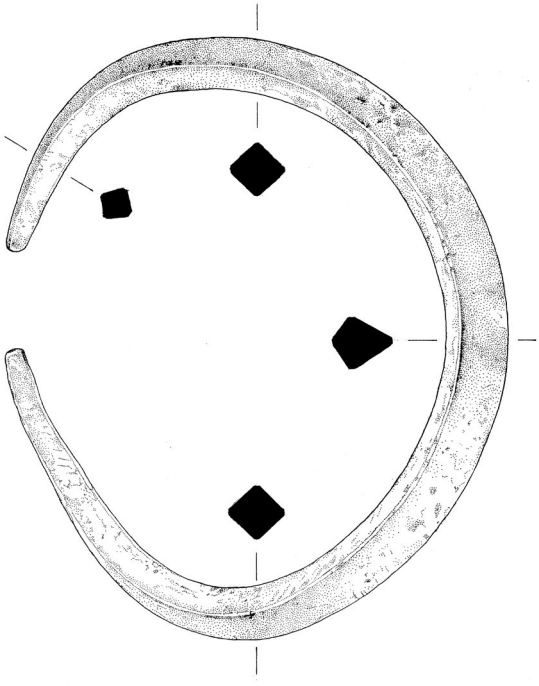
1.16 Penannular arm-ring of plain, lozenge-sectioned rod tapering to squared-off terminals; one testing nick on one lateral angle opposite the aperture. Diameter, 75.8mm (max); thickness, 8.6mm (max); weight, 59.86g. Figure 10.2; Plate 1.3. AN2017.3

1.17 Rectangular fragment of a parallel-sided, broad-band arm-ring roughly cut and/or broken at each end, with punched decoration in two registers of short, tongue-shaped notches along the edges and a median line of dots with two rows of interlocked, 'dagger'-shaped stamps with forked 'handles' on either side. The impression of the stamps is visible on the reverse. Length, 27.7mm; width, 22.3mm; thickness, 1.4mm; weight, 8.35g. Figure 10.3; Plate 1.3) AN2017.23

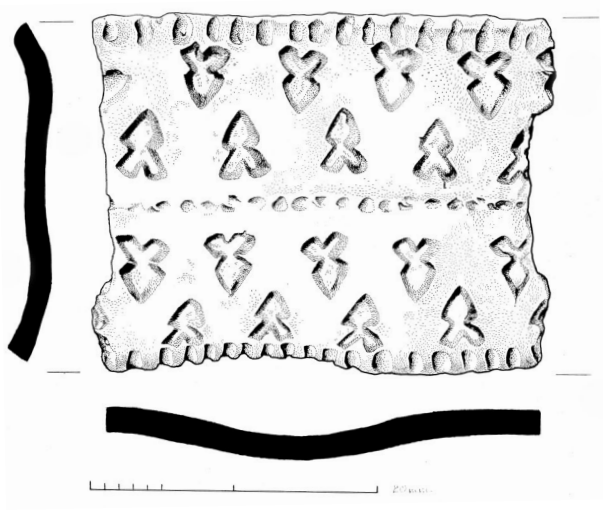
1.18 Ovoid arm-ring of plain, round-sectioned rod tapering to the ends, which are twisted once round each other; slight hammered faceting in places; two testing nicks on one side. Dimensions: 88.0mm x 73.7mm; thickness, 6.5mm (max); weight, 52.47g. Figure 10.4; Plate 1.3). AN2017.4

1.19 Ovoid arm-ring of lozenge-sectioned rod tapering slightly to the ends, which are twisted round each other; the two outer faces are decorated with punched, linked, apex-to-apex triangles containing triple pellets; slight wear in places; three testing nicks on one lateral angle and perhaps one on the opposite angle. Dimensions: 83.5mm x 65.4mm; thickness 5.0mm (max); weight, 24.06g. Figure 10.5–10.6; Plate 1.4. AN2017.5

▼ *Figure 10.2. Illustration of the penannular arm-ring (*cat. 1.16*). AN2017.3. Drawn by Jeffrey Wallis.*



▼ *Figure 10.3. Illustration of the broad-band arm-ring (*cat. 1.17*). AN2017.23. Drawn by Jeffrey Wallis.*



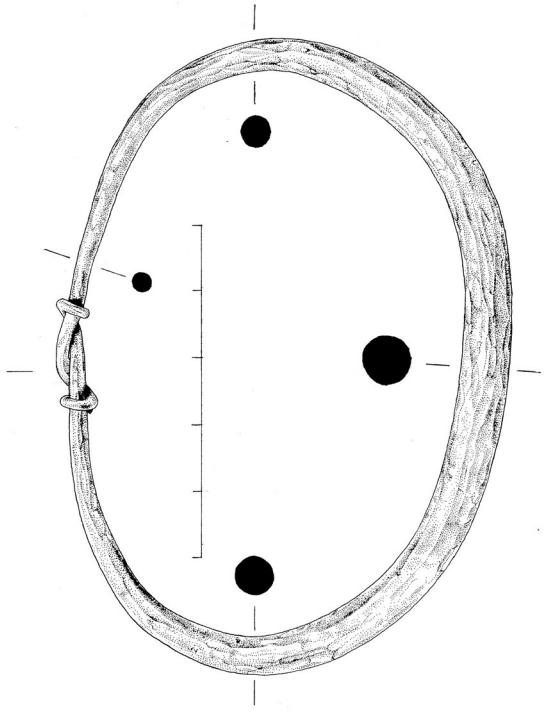


Figure 10.4. Illustration of the plain annular arm-ring (cat. 1.18)*. AN2017.4. Drawn by Jeffrey Wallis.*

Figure 10.5. Detail of stamped decoration of annular arm-ring (cat. 1.19)*. © Ashmolean Museum, University of Oxford. AN2017.5*

Neck-rings

1.20 Hack-silver terminal cut from a neck-ring composed of six wire rods twisted together in pairs, themselves also then twisted together. Hammered flat at one end into a thick, narrow rectangular strip with a slightly curved-up end, which has been broken off short, the other end of the twisted rods has been cut. Length, 61.8mm; width of hoop, 9.0mm (max); width of strip, 4.6mm; diameter of wire, *c.* 1.5mm; weight, 8.07g. Figure 10.7; Plate 1.4. AN2017.6

1.21 Hack-silver terminal cut from a neck-ring, composed of six rods twisted together in pairs and hammered at one end into a long, tapering, lozenge-section hook with a narrow S-scroll at the tip; two testing nicks on one angle and one on the hook. Length, 61.4mm; width of hoop, 8.3mm (max); diameter of wire, *c.* 1.8mm; weight, 13.79g. Figure 10.8; Plate 1.4. AN2017.7

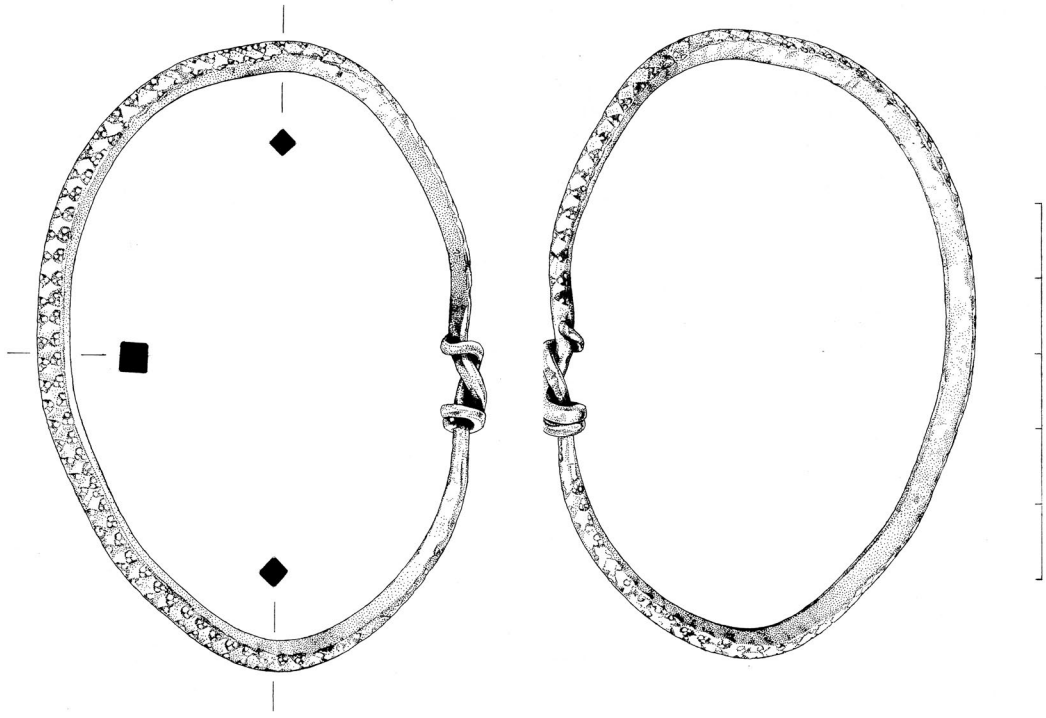


Figure 10.6. Illustration of the decorated annular arm-ring (cat. 1.19). AN2017.5. Drawn by Jeffrey Wallis.

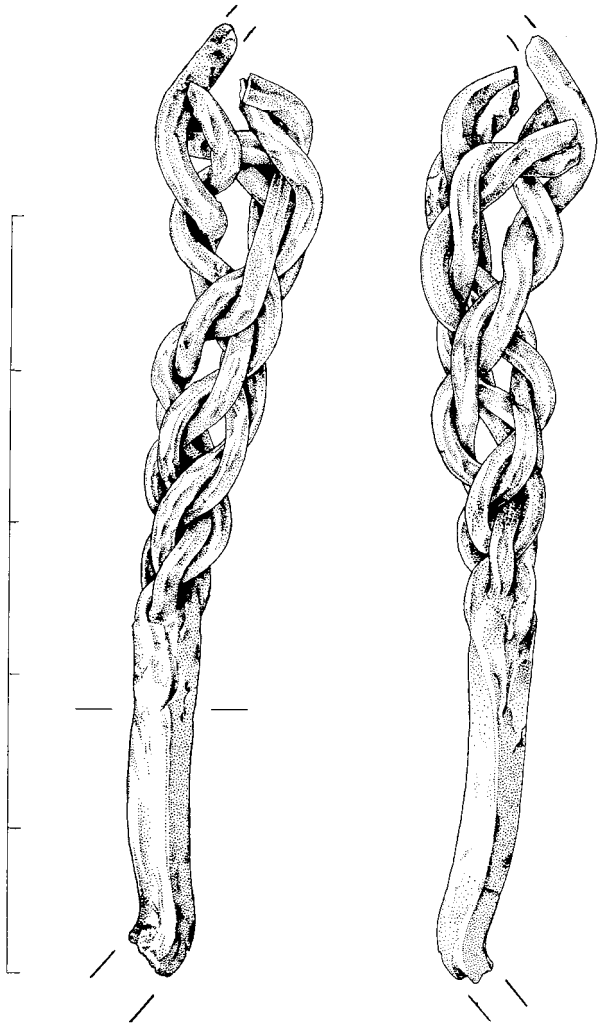


Figure 10.7. Illustration of neck-ring fragment (cat. 1.20). AN2017.6. Drawn by Jeffrey Wallis.

PLATE 1.3

1.16

1.17

1.18

PLATE 1.4

1.19

1.20

1.21

1.22

1.23

Figure 10.8. Illustration of neck-ring fragment with hooked fastener (cat. 1.21). AN2017.7. Drawn by Jeffrey Wallis.

Hooked tag

1.22 One-third of a flat silver disc originally forming part of an Anglo-Saxon hooked tag, roughly broken at each end. What remains of the plate suggests a circular shape, no evidence of the lugs or hook have survived. The very thin, foil-like disc fragment has relief decoration formed of two hatched 'arms' that divide the surviving fragment into two sub-triangular panels and are joined by a central junction. A similar hatched border runs around the rim. Each sub-triangular panel contains deeply incised ornament, in a poor state of preservation: one contains a deep V-shape in which may be a Trewhiddle-style animal-form, lying with legs bent under the body, with its head turned to look backwards. The adjacent panel has two perforations and contains the same V-shape within which is either a foliate pattern consisting of a pair of downward-curving lines, or another crude animal-form. The back is plain. Length, 12mm; width, 7.9mm; weight, 0.1g. Figure 10.9; Plate 1.4 (scale 2:1). AN2017.25

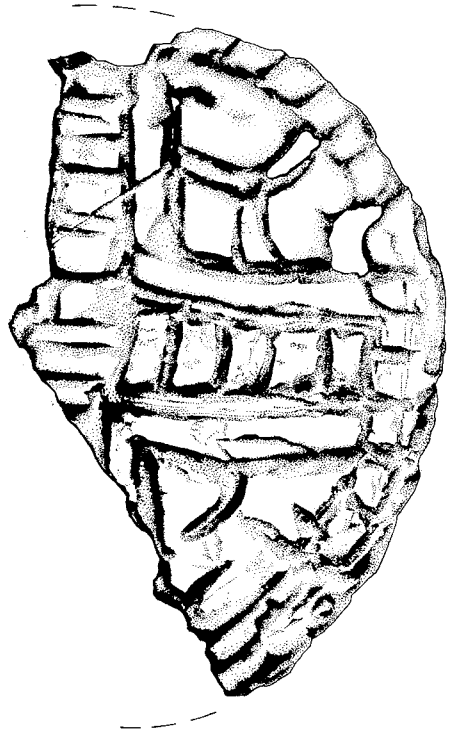


Figure 10.9. Illustration of the obverse of the hooked-tag fragment (cat. 1.22). AN2017.25. Drawn by Jeffrey Wallis.

The Gold

1.23 Hack-gold fragment formed of twisted gold rod of circular section cut across both ends, likely deriving from an arm- or neck-ring; the surface shows slight lengthwise ribbing consistent with twisting. Length, 14.4mm; diameter, 2.9mm (max); weight, 1.54g. Figure 10.10; Plate 1.4 (scale 2:1). AN2017.24

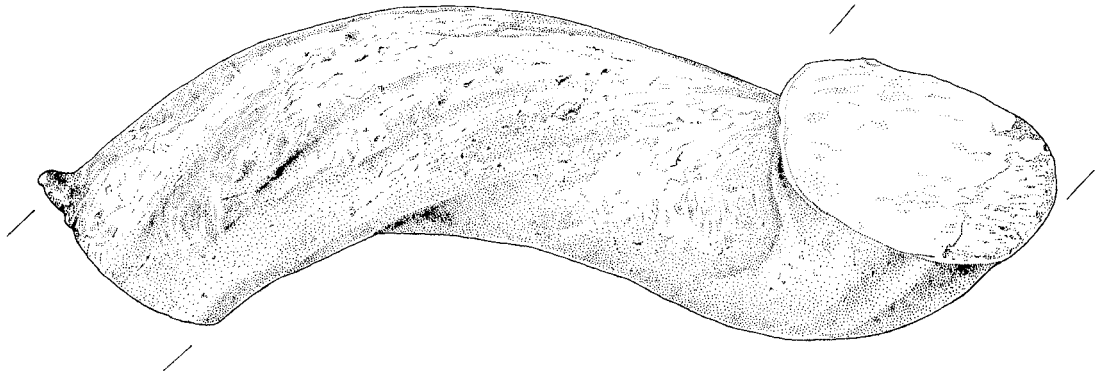


Figure 10.10. Illustration of the hack-gold fragment (cat. 1.23)*. AN2017.24. Drawn by Jeffrey Wallis.*

Catalogue 2

The coins

John Naylor

NOTES

For discussion of the design styles listed in each entry for the Two Emperors and Cross-and-Lozenge coinages see Chapter 5.

Within the chapters of this book, reference to coins in this catalogue are listed with the prefix **cat. 2.x** to clearly demarcate them from the objects in catalogue 1 which use the prefix **cat. 1.x**.

Representation of moneyer's name used in catalogue: the form of the moneyer's names within Catalogue 2 follows that as seen on the reverse of each coins, adopting the scheme used in Blackburn and Keynes (1998) and Blackburn (2003). I have taken their approach in using the predominant spelling where there is variation, e.g. Liafwald for spellings including **LIAFVALD**, **LIFVALD**, **LIOBVALD**, and **LIOFVALD**. Another system commonly used, e.g. within the SCBI volumes, is the conversion of moneyer's names into a Late West Saxon style. For convenience a concordance table is also included as an appendix at the back of the book (Appendix 4).

Die Axis measurement: for the Cross and Lozenge coinage this was taken using the cross arm preceding the start of the reverse inscription as the top of the coin.

Abbreviations:

Die code: TEo: Two Emperors (obverse)
TEr: Two Emperors (reverse)
CLo: Cross and Lozenge (obverse)
CLr: Cross and Lozenge (reverse)

Reverse styles within central lozenge: A = central saltire
A1 = central saltire, pellet in each angle
B = central cross
B1 = central cross, pellet in each angle

HCR: numbers prefixed by HCR are the Ashmolean Museum accession numbers for each coin. Note that some fragments do not currently carry an accession number.

Die codes by coin type are summarised in Table 11.1 at the back of the catalogue.

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ARCHBISHOPS OF CANTERBURY

ARCHBISHOP ÆTHELRED (870–889)

Cross and Lozenge coinage (*c.* 875–79) (North 251)

Obv. Diademed bust right, inscription outside within outer pellet circle.
Rev. Small cross pattée or saltire within central lozenge; cross bar at each angle cutting line to edge of inscription; all within outer pellet circle.

Canterbury Style

	Weight (g)	*Die axis*	
1	1.45	0°	*Ethelmund. Obv.* EÐERED ΛRCHIEPI~. *Rev.* ✝ EÐ / EL⁂ / MV / ND; Reverse Group Bvar: pellet cross with crescents between. Die code: *Obv*. CLo1; *Rev*. CLr1. Canterbury Style A/2. HCR68719.
2	1.42	270°	*Ethelwulf.* EÐERED ΛRCHIEPI~. *Rev.* ✝ EÐ / ·EL· / ·V⁂ / LF·; Reverse Group B. Die code: *Obv*. CLo2; *Rev*. CLr2. Canterbury Style A/2. HCR68720.

KINGDOM OF MERCIA

CEOLWULF II (875–*c.*879)

Two Emperors coinage (*c.* 875) (North 428): *London*

Obv. Diademed bust right, inscription outside within outer pellet circle.
Rev. Two emperors seated; winged angel (Victory) above.

3	1.17 chipped	270°	*Beagstan. Obv.* ✝CEOLVVF REX[ ]; Bust Group 2. *Rev.* BEΛCƧTΛN MONETΛ. Die code: *Obv*. TEo1; *Rev*. TEr1. HCR68573.
4	1.44	0°	*Cuthberht. Obv.* ✝CEOLVVF REX M (✝ formed of four pellets); Bust Group 2. *Rev.* CVÐBERHT MONETA. Die code: *Obv*. TEo2; *Rev*. TEr2. HCR68536.
5	1.42	45°	*Hereferth. Obv.* CEOLVVF REX MER; Bust Group 3. *Rev.* HEREFER·Ð MONETΛ (doublestruck). Die code: *Obv*. TEo3; *Rev*. TEr3. HCR 68535. HCR68535.

Cross and Lozenge coinage (*c.* 875–9) (North 429): All London Style.

Obv. Diademed bust right, inscription outside within outer pellet circle.
Rev. Small cross pattée or saltire within central lozenge; cross bar at each angle cutting line to edge of inscription; all within outer pellet circle.

6	1.30	45°	*Beagstan. Obv.* CEOLV / LF RE; Bust Group 1a. *Rev.* BE / ΛC / ƧT / ΛИ; Reverse group B. Die code: *Obv*. CLo3; *Rev*. CLr3. HCR68679.
7	1.37	135°	*Beagstan. Obv.* CIOLVV / LF REX; Bust Group 1a. *Rev.* BEΛC / STΛИ / MON / ETΛ; Reverse group A. Die code: *Obv*. CLo4 *Rev*. CLr4. HCR68541.
8	1.30	270°	*Beagstan. Obv.* CILVVLF / REX MI; Bust Group 1d. *Rev.* BEA / STΛИ / MON / ETA; Reverse group A. Same obverse die as **35–6.** Die code: *Obv*. CLo5; *Rev*. CLr5. HCR68678.
9	1.44	315°	*Beagstan. Obv.* CIOLVVL / F REX⁂; Bust Group 3a. *Rev.* BE / ΛC / ƧT / ΛИ; Reverse group B. Die code: *Obv*. CLo6; *Rev*. CLr6. HCR68677.

PLATE 1

Plate 1 (cont.)

	Weight (g)	*Die Axis*	
10	1.32	45°	*Berneah. Obv.* EOLVV / LF REX; Bust Group 1a. *Rev.* BE / RN / EA / HH; Reverse group A. Die code: *Obv*. CLo7; *Rev*. CLr7. HCR68682.
11	1.19	315°	*Berneah. Obv.* EOLVV / LF REX; Bust Group 1a. *Rev.* BER / HEA / HMOH / ETA; Reverse group A. Same obverse die as **10**. Die code: *Obv*. CLo7; *Rev*. CLr8. HCR68680.
12	1.25 chipped	135°	*Berneah. Obv.* EIOLVV / LF REX; Bust Group 1b. *Rev.* BE / RN / EA / HH; Reverse group A. Die code: *Obv*. CLo8; *Rev*. CLr9. HCR68681.
13	1.24 badly chipped	315°	*Berneah. Obv.* E[ ]V / LF REX; Bust Group 7. *Rev.* BER / HEA / HMON / ETA; Reverse group A; lozenge enclosed in pellet circle. Die code: *Obv*. Clo9; *Rev*. Clr10. HCR68694.
14	1.26	45°	*Biarnred. Obv.* HEIOLVLF / REX M⁻; Bust Group 1c. *Rev.* BIO / RN / RED / MON; Reverse group B. Die code: *Obv*. CLo10; *Rev*. CLr11. HCR68550.
15	1.32	135°	*Burgnoth. Obv.* EOLV / LF REX; Bust Group 1a. *Rev.* BVR / EGNOÐ / MON / ETA; reverse group A. Die code: *Obv*. CLo11; *Rev*. CLr12. HCR68542.
16	1.48	45°	*Burgnoth. Obv.* HEOLVVLF REX M⁻; inscription starts at shoulder; Bust Group 6. *Rev.* BVR / EGN / OÐ / MON; reverse group B. Die code: *Obv*. CLo12; *Rev*. CLr13. HCR68683.
17	1.30	135°	*Ciolwulf. Obv.* EIOLVVL / F REX; Bust Group 5. *Rev.* EIOL / VVL / FMO / NETA; reverse group B. Die code: *Obv*. CLo13; *Rev*. CLr14. HCR68684.
18	1.29	315°	*Dudecil. Obv.* EOLVV / LF REX; Bust Group 1b. *Rev.* DVD / ECI / LMO / NE(T); reverse group B. Die code: *Obv*. CLo14; *Rev*. CLr15. HCR68685.
19	1.32	225°	*Dudecil. Obv.* EIOVVLF / REX (doublestruck); Bust Group 2. *Rev.* DVD / ECI / LMO / NE; reverse group B. Same reverse die as **18**. Die code: *Obv*. CLo15; *Rev*. CLr15. HCR68687.
20	1.15	225°	*Dudecil. Obv.* ⁂EOLVV / LF REX; Bust Group 2. *Rev.* DVD / ECIL / MON / ELV; reverse group A. Die code: *Obv*. CLo16; *Rev*. CLr16. HCR68551.
21	1.30	315°	*Dudecil. Obv.* EIOLVV / LF REX; Bust Group 3a. *Rev.* DV / DE / EC / LM; reverse group B. Die code: *Obv*. CLo17; *Rev*. CLr17. HCR68686.
22	1.18	315°	*Dudecil. Obv.* EIOLVV / LF REX; Bust Group 3a. *Rev.* DV / DE / EC / LM; reverse group B. Same dies as **21**. Die code: *Obv*. CLo17; *Rev*. CLr17. HCR68688.
23	1.27	225°	*Dudecil. Obv.* HEOLVVL / F REX M; Bust Group 5. *Rev.* DVD / ECI / LM / ONH (cross formed of four pellets); reverse group A. Die code: *Obv*. CLo18; *Rev*. CLr18. HCR68549.
24	1.30	225°	*Eadulf. Obv.* EOLVV / LF RE ZH; Bust Group 1a. *Rev.* EA / DV / LF / MO; reverse group A. Die code: *Obv*. CLo19; *Rev*. CLr19. HCR68690.

Ceolwulf II (Cross-and-Lozenge cont.)

	Weight (g)	*Die Axis*	
25	1.18	135°	*Eadulf. Obv.* ⊏IOLVVL♣ / F REX· ; Bust Group 4a. *Rev.* EΛD / VLF / MOИ / ETΛ; reverse group B. Die code: *Obv*. CLo20; *Rev*. CLr20. HCR68691.
26	1.21	225°	*Ecgulf. Obv.* ⊏IOLVLF / REX M¯; Bust Group 1c. *Rev.* E⊏⊏♣ / VLF / MON / ETA; reverse group A. Die code: *Obv*. CLo21; *Rev*. CLr21. HCR68692.
27	1.32	315°	*Ethelstan. Obv. Obv.* ⊏IOLVLF / REX M¯ (doublestruck); Bust Group 1c. *Rev.* EÐE / LZT / ΛИ / MOИ; reverse group B. Die code: *Obv*. CLo22; *Rev*. CLr22. HCR68547.
28	0.63 fragment	45°	*Ethelstan? Obv.* ⊏IOLV[ ]X M¯; Bust Group 1c (inferred). *Rev.* [ ]/ LZT / ΛИ / [ ]; reverse group uncertain. Same obverse die as **27**. Die code: *Obv*. CLo22; *Rev*. CLr23. HCR68693.
29	1.33	135°	*Liafwald. Obv.* ⊏EOLV / VLF REX; Bust Group 1a. *Rev.* LIΛ / FV / ΛL / D+; reverse group A. Die code: *Obv*. CLo23; *Rev*. CLr24. HCR68540.
30	0.19 fragment	225°	*Liafwald. Obv.* [ ] / V[ ]; Bust Group 1a. *Rev.* [ ]/ D+; reverse group A. Same dies as **29**. Die code: *Obv*. CLo23; *Rev*. CLr24. HCR68689.
31	0.73 fragment	45°	*Liafwald. Obv.* [ ] / LF R[ ]; Bust Group 1a. *Rev.* [ ]VF / VVLD / [ ]; reverse group A. Die code: *Obv*. CLo24; *Rev*. CLr25. HCR68716.
32	1.29	135°	*Liafwald. Obv.* ♣⊏IOLVLF / REX M¯; Bust Group 1b. *Rev.* LIAF / VΛLD / MON / E⊥V; reverse group A. Die code: *Obv*. CLo25; *Rev*. CLr26. HCR68710.
33	0.27 fragment	225°	*Liafwald. Obv..* [ ]EOLV / [ ]; Bust Group uncertain. *Rev.* LIΛ[ ]; reverse group uncertain. Die code: *Obv*. CLo26; *Rev*. CLr27. HCR68725.
34	1.32	315°	*Liafwald. Obv.* ⊏EOLVV / LF REX; Bust Group 1a. *Rev.* LIF / VΛL / DM / ON; reverse group A; pellet on each side of lozenge; lis at ends of cross arms. Die code: *Obv*. CLo27; *Rev*. CLr28. HCR68705.
35	1.34	135°	*Liafwald. Obv.* +⊏ILVVLF / REX M I; Bust Group 1d. *Rev.* LIF / VΛ / LD / MO; reverse group A. Die code: *Obv*. CLo5; *Rev*. CLr29. HCR68695.
36	1.20 chipped	315°	*Liafwald. Obv.* +⊏ILVVLF / REX M I; Bust Group 1d. *Rev.* LIF / VΛ / LD / MO; reverse group A. Same obverse die as **35**. Die code: *Obv*. CLo5; *Rev*. CLr29. HCR68713.
37	1.31	315°	*Liafwald. Obv.* +⊏EOLV / LF REX[ ]; Bust Group 1a. *Rev.* LIO / FVΛ / LDM / ONE; reverse group A. Die code: *Obv*. CLo28; *Rev*. CLr30. HCR68712.
38	1.00 fragment	135°	*Liafwald. Obv.* [ ]VL / F REX; Bust Group 1a. *Rev.* LIOF / V[ ] / [ ]MO / NET; reverse group B. Same reverse die as **52**. Die code: *Obv*. CLo29; *Rev*. CLr31. HCR68711.
39	1.29	45°	*Liafwald. Obv.* ⊏IOLVVL / F REX· ; Bust Group 2. *Rev.* LIO / FVA / LDM / ONE; reverse group A. Die code: *Obv*. CLo30; *Rev*. CLr32. HCR68696.
40	1.34	45°	*Liafwald. Obv.* ⊏IOLVVL / F REX· ; Bust Group 2. *Rev.* LIO / FVA / LDM / ONE; reverse group A. Same dies as **39**. Die code: *Obv*. CLo30; *Rev*. CLr32. HCR68704.

PLATE 2

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Plate 2 (cont.)

	Weight (g)	*Die Axis*	
41	1.33	45°	*Liafwald. Obv.* CIOLVVL / F REX· ; Bust Group 2. *Rev.* LIO / FVA / LDM / ONE; reverse group A. Same dies as **39**. Die code: *Obv*. CLo30; *Rev*. CLr32. HCR68706.
42	1.39	45°	*Liafwald. Obv.* CIOLVVL / F REX· ; Bust Group 2. *Rev.* LIO / FVA / LDM / ONE; reverse group A. Same dies as **39**. Die code: *Obv*. CLo30; *Rev*. CLr32. HCR68548.
43	1.33	225°	*Liafwald. Obv.* CIOLVVL / F REX· ; Bust Group 2. *Rev.* LIO / FVA / LDM / ONE; reverse group A. Same dies as **39**. Die code: *Obv*. CLo30; *Rev*. CLr32. HCR68697.
44	1.00 fragment	225°	*Liafwald. Obv.* C[ ]L / F REX· ; Bust Group 2. *Rev.* [ ] / FVA / LDM / ONE; reverse group A. Same dies as **39**. Die code: *Obv*. CLo30; *Rev*. CLr32. HCR68714.
45	1.17	225°	*Liafwald. Obv.* CIOLVV / LF REX; Bust Group 2. *Rev.* LIO / FVA / LD♣ / MON; reverse group B. Die code: *Obv*. CLo31; *Rev*. CLr33. HCR68702.
46	1.35	45°	*Liafwald. Obv.* CIOLVV / LF REX; Bust Group 2. *Rev.* LIO / FVA / LD♣ / MON; reverse group B. Same reverse die as **45**. Die code: *Obv*. CLo32; *Rev*. CLr33. HCR68699.
47	1.21 chipped	225°	*Liafwald. Obv.* CIOLVV / LF REX; Bust Group 2. *Rev.* LIO / VAL / DM / ONET; reverse group B. Die code: *Obv*. CLo33; *Rev*. CLr34. HCR68707.
48	1.24	90°	*Liafwald. Obv.* CIOLVV / LF REX M¯; Bust Group 3 var. *Rev.* LIO / FVA / VA / LD♣; reverse group B. Die code: *Obv*. CLo34; *Rev*. CLr35. HCR68704.

Ceolwulf II (Cross-and-Lozenge cont.)

	Weight (g)	*Die Axis*	
49	1.28	210°	*Liafwald. Obv.* ꟾIOLVVL / F REX⁂; Bust Group 4a. *Rev.* LIOF / Vꟾ / LDM / ONET; reverse group B. Die code: *Obv*. CLo35; *Rev*. CLr36. HCR68546.
50	1.30	135°	*Liafwald. Obv.* ꟾIOLVVL / F REX⁂; Bust Group 4a. *Rev.* LIOF / Vꟾ / LDM / ONET; reverse group B. Same dies as **49**. Die code: *Obv*. CLo35; *Rev*. CLr36. HCR68708.
51	1.33	45°	*Liafwald. Obv.* ꟾIOLVVL / F REX⁂; Bust Group 4a. *Rev.* LIO / FVꟾ / LDM / ONET (first O has four pellets around forming a square); reverse group B; trefoil of pellets outside lozenge in quarter 2. Same obverse die as **39**. Die code: *Obv*. CLo35; *Rev*. CLr37. HCR68709.
52	1.11 fragment	225°	*Liafwald. Obv.* [ ]ꟾE[ ]VV / LF REX[ ]; Bust Group 4a. *Rev.* LI[ ]F / V[ ]L / [ ]MO / NET; reverse group B. Same reverse die as **38**. Die code: *Obv*. CLo36; *Rev*. CLr31. HCR68717.
53	1.26	60°	*Liafwald. Obv.* ꟾIOVV / LF REX; Bust Group 4b. *Rev.* LIOF / VꟾL / DMO / ИET; reverse group B. Die code: *Obv*. CLo37; *Rev*. CLr38. HCR68543.
54	1.33	225°	*Liafwald. Obv.* ⁂ꟾIOVVLF / REX M; Bust Group 4b. *Rev.* LIOF / VꟾD / MO / ИET; reverse group B. Die code: *Obv*. CLo38; *Rev*. CLr39. HCR68700.
55	1.23	315°	*Liafwald. Obv.* ⁂ꟾIOVVLF / REX M; Bust Group 4b. *Rev.* LIOF / Vꟾ / LD⁂ / MON; reverse group B. Same obverse die as **54**. Die code: *Obv*. CLo38; *Rev*. CLr40. HCR68698.
56	1.29	45°	*Liafwald. Obv.* ✝ꟾIOLVVL / F REX M; Bust Group 5. *Rev.* LIO / FVᴧ / LDM / ONET; reverse group B. Die code: *Obv*. CLo39; *Rev*. CLr41. HCR68701.
57	0.61 fragment	225°	*Liafwald. Obv.* ꟾIOLV[ ]X; Bust Group uncertain. *Rev.* [ ]OF / VꟾL / [ ]; reverse group B. Die code: *Obv*. CLo40; *Rev*. CLr42. HCR68715.
58	0.64 fragment	315°	*Uncertain. Obv.* [ ](E)OLVV / LF[ ]; Bust Group 1a. *Rev.* [ ] / [ ]LF / [ ]ON / ETꟾ; reverse group A. Die code: *Obv*. CLo41; *Rev*. CLr43. HCR68718.

Kingdom of Wessex

Alfred the Great (871–899)

Two Emperors coinage (*c.* 875) (North 632): *London*

Obv. Diademed bust right, inscription outside within outer pellet circle.
Rev. Two emperors seated; winged angel (Victory) above.

59	1.40	180°	*Beagstan. Obv.* ✝ᴧELFRED REX ᴧNGLO (lozenge-shaped O); Bust Group 1. *Rev.* BEᴧGSTᴧ MON·ETᴧ. Die code: *Obv*. TEo4; *Rev*. TEr4. HCR68532.
60	1.27 chipped	75°	*Beagstan. Obv.* ✝ᴧELFRED REX ᴧNGLO✝ (lozenge-shaped O); Bust Group 1. *Rev.* BEᴧGSTᴧ MON·ETᴧ. Die code: *Obv*. TEo5; *Rev*. TEr5. HCR68566.
61	1.33	0°	*Dudecil. Obv.* ✝ᴧELFRED REX ᴧNGLO✝ (lozenge-shaped O); Bust Group 1. *Rev.* DVDECL MON·ETᴧ⁂. Die code: *Obv*. TEo6; *Rev*. TEr6. HCR68534.
62	1.35	90°	*Dudecil.* ✝ᴧELFRED RE ᴧNGLO✝ (lozenge-shaped O); Bust Group 1. *Rev.* DVDEIL MON··ETᴧ. Die code: *Obv*. TEo7; *Rev*. TEr7. HCR 68533.
63	1.38	180°	*Dudecil.* ✝ᴧELFRED REX ᴧNGLO✝ (lozenge-shaped O); Bust Group 1. *Rev.* DVDECIL MONETᴧ. Die code: *Obv*. TEo8; *Rev*. TEr8. HCR68567.
64	1.31 chipped	180°	*Eadulf.* ✝ᴧELFRED REX ᴧNGLO✝ (lozenge-shaped O); Bust Group 2. *Rev.* EᴧDVL·F MON·ETᴧ. Die code: *Obv*. TEo9; *Rev*. TEr9. HCR68568.
65	1.46	90°	*Eanred.* ✝ᴧELFRED REX ᴧNGLO✝ (lozenge-shaped O); Bust Group 1. *Rev.* EᴧNR··ED MON··ETᴧ. Die code: *Obv*. TEo10; *Rev*. TEr10. HCR68569.
66	1.40	75°	*Heawulf.* ✝ᴧELFRED REX ᴧNGLO (lozenge-shaped O); Bust Group 1. *Rev.* HEᴧVVLF MON·ETᴧ. Die code: *Obv*. TEo11; *Rev*. TEr11. HCR68570.

PLATE 3

67	1.38	90°	*Heawulf.* +ΛELFRED REX ΛNGLO (lozenge-shaped O); Bust Group 1. *Rev.* HΕΛVVLF MON·ETΛ. Same dies as **66**. Die code: *Obv*. TEo11; *Rev*. TEr11. HCR68571.
68	1.00 chipped	180°	*Uncertain (Beagstan?).* +ΛELFRED RE[ ]; Bust Group 1. *Rev.* [ ]Λ MON··ETΛ. Die code: *Obv*. TEo12; *Rev*. TEr12. HCR68572.

ALFRED THE GREAT (871–899)

Cross and Lozenge coinage (*c*. 875–79) (North 629–31)

Obv. Diademed bust right, inscription outside within outer pellet circle.
Rev. Small cross pattée or saltire within central lozenge; cross bar at each angle cutting line to edge of inscription; all within outer pellet circle.

Transitional Style: *London?*

Obv. As standard type except bust within inner circle.

	Weight (g)	*Die axis*	
69	1.22	90°	*Cenred. Obv.* +ÆLFRED REX ΣΛΧ *Rev.* ŁEN / RED / MON / ETΛ+. Die code: *Obv*. CLo42; *Rev*. CLr44. HCR68584.
70	1.42	105°	*Eanred. Obv.* +ÆLFRED REX ΖΛΧ *Rev.* EΛN / RED / MON / ETΛ. Die code: *Obv*. CLo43; *Rev*. CLr45. HCR68574.
71	1.35	225°	*Ethelred. Obv.* +ÆLFRED REX ΣΛ *Rev.* E·ÐE / RED / MON / ETΛ (doublestruck). Die code: *Obv*. CLo44; *Rev*. CLr46. HCR68618.
72	1.25 chipped	225°	*Heahstan. Obv.* +ÆLFRED REX ΣΛΧ *Rev.* HΕΛ / HΣT / ΛNMO / ETΛ (ΛN ligated). Die code: *Obv*. CLo45; *Rev*. CLr47. HCR68626.

Alfred the Great (Cross-and-Lozenge cont.)

Canterbury Style

	Weight (g)	*Die axis*	
73	1.17	270°	*Biarnred. Obv.* ELFRED REX+; inscription starts at shoulder. *Rev.* +BI / ᚪR / NR / ED; Reverse Group B1; pellet on each side of lozenge. Canterbury Style A/1. Die code: *Obv.* CLo46; *Rev.* CLr48. HCR68577.
74	1.21	90°	*Biarnred. Obv.* ELFRED REX+; inscription starts at shoulder. *Rev.* +BI / ᚪR / NR / ED; Reverse Group B1; pellet on each side of lozenge. Canterbury Style A/1. Same dies as **73**. Die code: *Obv.* CLo46; *Rev.* CLr48. HCR68578.
75	1.14	180°	*Burgnoth. Obv.* ELFRED REX; inscription starts at shoulder. *Rev.* +B / VR / GN / O-Ð; Reverse Group B1; pellet on each side of lozenge. Canterbury Style A/1. Die code: *Obv.* CLo47; *Rev.* CLr49. HCR68552.
76	1.14	180°	*Burgnoth. Obv.* ELFRED REX; inscription starts at shoulder. *Rev.* +B / VR / GN / O-Ð; Reverse Group B1; pellet on each side of lozenge. Canterbury Style A/1. Same dies as **75**. Die code: *Obv.* CLo47; *Rev.* CLr49. HCR68580.
77	1.31	270°	*Burgnoth.* ELFRED REX; inscription starts at shoulder. *Rev.* +BV / RG / NO / -Ð; Reverse Group B1; pellet on each side of lozenge. Canterbury Style A/1. Die code: *Obv.* CLo48; *Rev.* CLr50. HCR68579.
78	1.21	90°	*Diarmund. Obv.* +ᚪ / ELFRED / REX. *Rev.* +DI / ᚪR / MV / ND; Reverse Group B. Canterbury Style A/3. Die code: *Obv.* CLo49, *Rev.* CLr51. HCR68553.
79	1.31	90°	*Diarmund. Obv.* ᚪ+ELFRE / D REX. *Rev.* +D / Iᚪ / RM / VND; Reverse Group A1; pellet on each side of lozenge. Canterbury Style B/4. Die code: *Obv.* CLo50, *Rev.* CLr52. HCR68603.
80	1.33	0°	*Diarmund. Obv.* ᚪ+ELFRE / D REX. *Rev.* +DI / ᚪR / MV / ND; Reverse Group A1; pellet on each side of lozenge. Canterbury Style A/4. Die code: *Obv.* CLo51, *Rev.* CLr53. HCR68604.
81	1.05	180°	*Eadulf. Obv.* +ELFR / ED REX. *Rev.* +.E. / .AD / ⁂V⁂ / LF.; Reverse Group B. Canterbury Style A/2. Die code: *Obv.* CLo52, *Rev.* CLr54. HCR68609.
82	1.26	270°	*Ethelgar. Obv.* ELFRE / D REX. *Rev.* +E-Ð / ELG / ᚪRM / ONE; Reverse Group A; pellet on each side of lozenge. Canterbury Style Cii/6. Die code: *Obv.* CLo53 *Rev.* CLr55. HCR68614.
83	1.24	270°	*Ethelgar. Obv.* ELFRE / D REX. *Rev.* +E-Ð / ELG / ᚪRM / ONE; Reverse Group A; pellet on each side of lozenge. Canterbury Style Cii/6. Same dies as **82**. Die code: *Obv.* CLo53, *Rev.* CLr55. HCR68616.
84	1.05 chipped	270°	*Ethelgar. Obv.* ᚪELFRE / D REX. *Rev.* +E-Ð / ELG / ᚪRM / ONE; Reverse Group A; pellet on each side of lozenge. Canterbury Style Cii/6. Same reverse die as **82**. Die code: *Obv.* CLo54, *Rev.* CLr55. HCR68617.
85	1.07	90°	*Ethelgar. Obv.* ᚪELFRE / D REX. *Rev.* +E· / -ÐE· / LG· / ·ᚪR·; Reverse Group A. Canterbury Style Cii/6. Die code: *Obv.* CLo55. *Rev.* CLr56. HCR68615.
86	1.37	0°	*Ethelred. Obv.* +ELFR / ED REX. *Rev.* +E / ÐE / LR / ED⁂; Reverse Group B. Canterbury Style A/2. Die code: *Obv.* CLo56, *Rev.* CLr57. HCR68620.

PLATE 4

	Weight (g)	*Die Axis*	
87	1.35	0°	*Guthhere. Obv.* +ΛELFRE / D REX. *Rev.* +G / VÐ / HE / RE: Reverse Group A1; pellet on each side of lozenge. Canterbury Style B/5. Die code: *Obv.* CLo57, *Rev.* CLr58. HCR68623.
88	1.28	45°	*Guthhere. Obv.* Λ+ELFRE / D REX. *Rev.* +G / VÐ / HE / RE: Reverse Group A1; pellet on each side of lozenge. Canterbury Style B/4. Die code: *Obv.* CLo58, *Rev.* CLr59. HCR68557.
89	1.00	270°	*Heahstan. Obv.* ÆLFRE / D REX Z. *Rev.* +HE / ΛH / ZT♣ / ΛN: Reverse Group B. Canterbury Style A/2. Die code: *Obv.* CLo59, *Rev.* CLr60. See also: 174–5 (Winchester style). HCR68625.
90	1.44	0°	*Tirwald. Obv.* +Λ+ELFRE / D REX. *Rev.* +TI / RV / VΛ / LD: Reverse Group A1; pellet on each side of lozenge. Canterbury Style B/A2 mule. Die code: *Obv.* Clo60, *Rev.* CLr61. HCR68539.
91	1.35	270°	*Tirwald. Obv.* +Λ+ELFRE / D REX. *Rev.* +TI / RV / VΛ / LD: Reverse Group B1; pellet on each side of lozenge. Canterbury Style B/A3 mule. Same obverse die as **90**. Die code: *Obv.* CLo60, *Rev.* CLr62. HCR68663.
92	1.34 chipped	90°	*Tirwald. Obv.* ELFRED / REX[ ]. *Rev.* +TI / RV / VΛ / LD: Reverse Group B1; pellet on each side of lozenge. Canterbury Style A/3. Die code: *Obv.* CLo61, *Rev.* CLr63. HCR68664.
93	1.23	90°	*Tirwald. Obv.* +ΛELFR / ED REX. *Rev.* TIR / VV / Λ / LD: Reverse Group A. Canterbury Style B/5. Die code: *Obv.* CLo62, *Rev.* CLr64. HCR68660.
94	1.23	0°	*Tirwald. Obv.* ELFRE / D REX. *Rev.* TI♣ / RV / EΛ / LD; Reverse Group A. Canterbury Style Ci/6. Die code: *Obv.* CLo63, *Rev.* CLr65. HCR68561.
95	1.10 chipped	180°	*Tirwald. Obv.* +ELFRE / D REX. *Rev.* +TI / RV / EΛ / LD♣; Reverse Group A. Canterbury Style Cii/6. Die code: *Obv.* CLo64, *Rev.* CLr66. HCR68661.
96	1.05 chipped	270°	*Tirwald. Obv.* +ELFRE / D REX. *Rev.* +TI· / ·RV / ·EΛ· / ·LD·; Reverse Group A. Canterbury Style Cii/6. Same obverse die as **95**. Die code: *Obv.* CLo64, *Rev.* CLr67. HCR68662.

Alfred the Great (Cross-and-Lozenge, Canterbury Style cont.)

97	1.09 chipped	90°	*Tirwald. Obv.* ELFRE / D REX. *Rev.* +TI· / ·RV· / ·EA· / ·LD·; Reverse Group A. Canterbury Style Cii/6. Die code: *Obv.* CLo65, *Rev.* CLr68. HCR68665.
98	1.06 chipped	270°	*Torhtmund Obv.* ELFRE / D REX. *Rev.* +TO· / ·RH· / ·TM· / VND·; Reverse Group A. Canterbury Style Ci/6. Die code: *Obv.* CLo66, *Rev.* CLr69. HCR68668.
99	1.13	240°	*Torhtmund. Obv.* ELFRE / D REX; trefoil in front of face. *Rev.* TOR / ·HT· / ·MV· / ·ND·; Reverse Group A. Canterbury Style Cii/6. Die code: *Obv.* CLo67, *Rev.* CLr70. HCR68666.
100	1.19	0°	*Torhtmund. Obv.* ELFRE / D REX; trefoil in front of face. *Rev.* TOR / ·HT· / ·MV· / ·ND·; Reverse Group B; pellet on reach side of lozenge. Canterbury Style Cii/6. Same dies as **99**. Die code: *Obv.* CLo67, *Rev.* CLr70. HCR68667.
101	1.24	0°	*Torhtmund. Obv.* ELFRE / D REX; trefoil in front of face. *Rev.* +TO· / ·RH· / ·TM♣ / VND·; Reverse Group B; pellet on reach side of lozenge. Canterbury Style Cii/6 Same obverse die as **99**. Die code: *Obv.* CLo67, *Rev.* CLr71. HCR68646.
102	1.10	270°	*Wibearht. Obv.* ELFRE / D REX. *Rev.* VVI· / ·BE♣ / AR· / ·HT ; Reverse Group A; pellet on reach side of lozenge. Canterbury Style Ci/6. Die code: *Obv.* CLo68, *Rev.* CLr72. HCR68575.
103	1.09	90°	*Wibearht. Obv.* ELFRE / D REX. *Rev.* +VV / IB♣ / EA· / ·RHT; Reverse Group A. Canterbury Style Ci/6. Same obverse die as **102**. Die code: *Obv.* CLo68, *Rev.* CLr73. HCR68670.

London Style

	Weight (g)	*Die Axis*	
104	1.32	225°	*Bernulf. Obv.* +ÆLFRED / REX ΣA; Bust Group 1 (related). *Rev.* BER / NVLF / MON / ETA; Reverse Group A. Die code: *Obv.* CLo69, *Rev.* CLr74. HCR68576.
105	1.23	135°	*Burgwald. Obv.* +ELFRED / RE Z; Bust Group 1a. *Rev.* BV / RV / AL / D+; Reverse Group B. Die code: *Obv.* CLo70, *Rev.* CLr75. HCR68582.
106	1.32	45°	*Cenred. Obv.* +LEFRED / RE Z; Bust Group 1a. *Rev.* CEN / RED / MON / ETA; Reverse Group A. Die code: *Obv.* CLo71, *Rev.* CLr76. HCR68585.
107	1.36	90°	*Ciolwulf. Obv.* ELFRE. / D REX; Bust Group 1a. *Rev.* CIO / LVV / LF· / MON; Reverse Group A. Die code: *Obv.* CLo72, *Rev.* CLr77. HCR68587
108	1.35	90°	*Ciolwulf. Obv.* ELFRE. / D REX; Bust Group 1a. *Rev.* CIO / LVV / LF· / MON; Reverse Group A. Same dies as **107**. Die code: *Obv.* CLo72, *Rev.* CLr77. HCR68588.
109	1.32	90°	*Ciolwulf. Obv.* ELFRE. / D REX; Bust Group 1a. *Rev.* CIO / LVV / LF· / MON; Reverse Group A. Same dies as **107**. Die code: *Obv.* CLo72, *Rev.* CLr77. HCR68559.
110	1.36	90°	*Ciolwulf. Obv.* ELFRE. / D REX; Bust Group 1.a *Rev.* CIO / LVV / LF· / MON; Reverse Group A. Same dies as **107**. Die code: *Obv.* CLo72, *Rev.* CLr77. HCR68591.
111	1.33	90°	*Ciolwulf. Obv.* ELFRE. / D REX; Bust Group 1a. *Rev.* CIO / LVV / LF· / MON; Reverse Group A. Same dies as **107**. Die code: *Obv.* CLo72, *Rev.* CLr77. HCR68592.
112	1.30 chipped	90°	*Ciolwulf. Obv.* ELFRE. / D REX; Bust Group 1a. *Rev.* CIO / LVV / LF· / MON; Reverse Group A. Same dies as **107**. Die code: *Obv.* CLo72, *Rev.* CLr77. HCR68554.
113	1.29	90°	*Ciolwulf. Obv.* ELFRE. / D REX; Bust Group 1a. *Rev.* CIO / LVV / LF· / MON; Reverse Group A. Same dies as **107**. Die code: *Obv.* CLo72, *Rev.* CLr77. HCR68594.
114	1.32	75°	*Ciolwulf. Obv.* ELFRE. / D REX; Bust Group 1a. *Rev.* CIO / LVV / LF· / MON; Reverse Group A. Same dies as **107**. Die code: *Obv.* CLo72, *Rev.* CLr77. HCR68595.

PLATE 5

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115	1.00 chipped	225°	*Ciolwulf. Obv.* ELFRE / D REX; Bust Group 1a. *Rev*. ꟾIOL / VLF / MOИ / ETA; Reverse Group B; pellet on each side of lozenge. Die code: *Obv*. CLo73, *Rev.* CLr78. HCR68586.
116	1.27	90°	*Ciolwulf. Obv.* ⊹ELFRE / D REX; Bust Group 1a. *Rev*. ꟾIOL / VVLF / MOИ / ETA; Reverse Group B; pellet on each side of lozenge. Die code: *Obv*. CLo74, *Rev.* CLr79. HCR68593.
117	1.40	45°	*Ciolwulf. Obv.* ÆLFRED REX ΣA; inscription starts at shoulder; Bust Group 1d. *Rev*. ꟾIOL / VVLF / MOИ / ETA; Reverse Group A; hooked motif on each side of lozenge. Die code: *Obv*. CLo75, *Rev.* CLr80. HCR68555.
118	0.74 chipped	135°	*Ciolwulf. Obv.* ELFRE / D REX⁂; Bust Group 2. *Rev*. ꟾIOL / VLF / MOИ / ETA; Reverse Group B; pellet on each side of lozenge. Die code: *Obv*. CLo76, *Rev.* CLr81. HCR68590.
119	1.14	45°	*Ciolwulf. Obv.* ELFRED / REX; Bust Group 3a. *Rev*. ꟾIOL⁂ / VLF / MON / ETA; Reverse Group B; pellet on each side of lozenge. Die code: *Obv*. CLo77, *Rev.* CLr82. HCR68596.
120	0.93 chipped	225°	*Ciolwulf. Obv.* ELFRED / REX; Bust Group 3a. *Rev*. ꟾIOL⁂ / VLF / MON / ETA; Reverse Group B; pellet on each side of lozenge. Same dies as **119**. Die code: *Obv*. CLo77, *Rev.* CLr82. HCR68597.

Alfred the Great (Cross-and-Lozenge, London Style cont.)

	Weight (g)	*Die Axis*	
121	1.27 chipped	45°	*Cynelm. Obv.* ELFRE / D RE: ; Bust Group 5. *Rev.* ᴆUИ / ELM / MO / ИE; Reverse Group A; pellet on side of lozenge in quarters 1 and 3. Die code: *Obv*. CLo78, *Rev.* CLr83. HCR68598.
122	1.28	270°	*Dealing. Obv.* ELFRE / D REX; Bust Group 1a. *Rev*. DE / ⅄L / INᴆ / MON; Reverse Group A. Die code: *Obv*. CLo79, *Rev.* CLr84. HCR68599.
123	1.18 chipped	255°	*Dealing. Obv.* \ELFRED / REX ΣM; Bust Group 1b. *Rev*. DEA / LINᴆ / MON / ETA; Reverse Group A; cross on each side of lozenge. Die code: *Obv*. CLo80, *Rev.* CLr85. HCR68600.
124	1.21 chipped	315°	*Dealing. Obv.* \ELFRED / REX ΣM; Bust Group 1b. *Rev*. DE⅄ / LLIN / ᴆMO / ИET; Reverse Group B. Same obverse die as **123**. Die code: *Obv*. CLo80, *Rev.* CLr86. HCR68601.
125	1.11 chipped	45°	*Dealing. Obv.* \ELFRED / REX ΣM; Bust Group 1b. *Rev*. D⅄ / LLIN / [ ]O / ИET; Reverse Group B. Same obverse die as **123**. Die code: *Obv*. CLo80, *Rev.* CLr87. HCR68602.
126	1.32	135°	*Eadulf. Obv.* +ÆLFRED REX ΣAX, inscription starts at shoulder; Bust Group 1a. *Rev*. EAD / VVL / FMO / ИETA; Reverse Group A1; cross on each side of lozenge. Die code: *Obv*. CLo81, *Rev.* CLr88. HCR68608.
127	1.33	225°	*Ecgulf. Obv.* ELFRE: / D REX; Bust Group 1a. *Rev*. EᴆV / VLF / MON / ET⅄; Reverse Group A1. Die code: *Obv*. CLo82, *Rev.* CLr89. HCR68610.
128	1.23	225°	*Ecgulf. Obv.* ⁂ELFRE / D REX; Bust Group 2. *Rev*. EᴆᴆG / VLF / MOИ / ET⅄; Reverse Group B1. Die code: *Obv*. CLo83, *Rev.* CLr90. HCR68612.
129	1.29	225°	*Ecgulf. Obv.* ⁂ELFRE / D REX; Bust Group 2. *Rev*. EᴆᴆG / VLF / MOИ / ET⅄; Reverse Group B1. Same obverse die as **128**. Die code: *Obv*. CLo83, *Rev.* CLr91. HCR68560.
130	1.20	135°	*Ecgulf. Obv.* ⁂[ ]LFRE⁂ / D REX; Bust Group 3a. *Rev*. EᴆᴆG / VLF / MOИ / ET⅄; Reverse Group B; trefoil of pellets on each side of lozenge. Die code: *Obv*. CLo84, *Rev.* CLr92. HCR68613.
131	1.19	135°	*Ecgulf. Obv.* ⁂ÆLFRE⁂ / D REX; Bust Group 3a. *Rev*. EᴆᴆG / VLF / MOИ / ET⅄; Reverse Group B; trefoil of pellets on each side of lozenge. Same dies as **130**. Die code: *Obv*. CLo84, *Rev.* CLr92. HCR68727.
132	1.20	225°	*Ecgulf. Obv.* ELFR⁂ / ED REX; Bust Group 5. *Rev*. EᴆᴆG / VLF / MOИ / ET⅄; Reverse Group B1; pellet on each side of lozenge. Die code: *Obv*. CLo85, *Rev.* CLr93. HCR68611.
133	1.38 chipped	90°	*Ethelstan. Obv.* +ELFRED / REX ZAI; Bust Group 6. *Rev*. +\E-Đ / EL / ZT / ⅄N; Reverse Group A. Die code: *Obv.* CLo86, *Rev.* CLr94. HCR68621.
134	1.37	225°	*Herebald. Obv.* ÆLFRED REX Σ; inscription starts at shoulder; Bust Group 1a. *Rev*. HERE / BAL / DMO / NETA; Reverse Group A; line ending in pellet lis on each side of lozenge. Die code: *Obv*. CLo87, *Rev.* CLr95. HCR68630.
135	1.39	225°	*Herebald. Obv.* ÆLFRE / D REX ΣA⅄; inscription starts at shoulder; Bust Group 1a. *Rev*. HERE / BA⅄L / DMO / NETA; Reverse Group A; line ending in pellet lis on each side of lozenge. Same reverse die as **134**. Die code: *Obv*. CLo88, *Rev.* CLr95. HCR68629.
136	1.44	45°	*Herebald. Obv.* ÆLFRE / D REX Σ; inscription starts at shoulder; Bust Group 4b (var). *Rev*. HERE / B⅄L / DMO / NET⅄; Reverse Group A1 with saltire extending beyond lozenge, each ending in lis formed of a wedge and two pellets. Die code: *Obv*. CLo89, *Rev.* CLr96. HCR68558.
137	1.36	315°	*Herebald. Obv.* ÆLFR / ED RE; inscription starts at shoulder; Bust Group 4b (var). *Rev*. HE / RE. / .BA / LDM; Reverse Group A with saltire extending beyond lozenge, each ending in lis formed of a wedge and two pellets. Star in centre of lozenge. Die code: *Obv*. CLo90, *Rev.* CLr97 HCR68559.
138	1.16	315°	*Heawulf. Obv.* ELFRE / D REX; Bust Group 1a. *Rev*. +HE / ⅄VL / LF: / MO:; Reverse Group B. Die code: *Obv*. CLo91, *Rev.* CLr98. HCR68628.

PLATE 6

121 122 123 124 125 126

127 128 129 130 131 132

133 134 135 136 137 138

139 140 141 142 143 144

	Weight (g)	*Die Axis*	
139	1.15	180°	*Heawulf. Obv.* **ELFRE / D REX**; Bust Group 1a. *Rev*. **+HEAT / VVL / FMO / N+**; Reverse Group B; pellet on each side of lozenge. Die code: *Obv*. CLo92, *Rev.* CLr99. HCR68556.
140	1.21	270°	*Hereferth. Obv.* **ELFRE / D REX**; Bust Group 1a. *Rev*. **hER / EFE / R-Đ / MON**; Reverse Group A; hooked motif on each side of lozenge.. Die code: *Obv*. CLo93, *Rev.* CLr100. HCR68640.
141	1.30	270°	*Hereferth. Obv.* **ELFRE. / D RE Z+**; Bust Group 1a. *Rev*. **hE / RE / FE / R-Đ**; Reverse Group B. Die code: *Obv*. CLo94, *Rev.* CLr101. HCR68636.
142	1.21 chipped	90°	*Hereferth. Obv.* **ELFRE / D REX**; Bust Group 1a. *Rev*. **hER / EFE / R-Đ / MON**; Reverse Group A; trefoil of pellets on each side of lozenge. Die code: *Obv*. CLo95, *Rev.* CLr102. HCR68639.
143	1.10	270°	*Hereferth. Obv.* **+ELFRE / D RE Z**; Bust Group 1a (var). *Rev*. **HER / EFE / R-Đ: / MON**; Reverse Group A. Die code: *Obv*. CLo96, *Rev.* CLr103. HCR68562.
144	1.11	0°	*Hereferth. Obv.* **ELFRE / D REX**; Bust Group 2. *Rev*. **hER / EFE / R-Đ / MON**; Reverse Group A; cross on each side of lozenge. Die code: *Obv*. CLo97, *Rev.* CLr104. HCR68631.

ALFRED THE GREAT (Cross-and-Lozenge, London Style cont.)

145	1.24	270°	*Hereferth. Obv.* ELFRE / D REX; Bust Group 2. *Rev*. hE / RE / FE / R-Đ; Reverse Group A; trefoil of pellets on each side of lozenge. Same obverse die as **144**. Die code: *Obv*. CLo97, *Rev.* CLr105. HCR68637.
146	1.34	270°	*Hereferth. Obv.* ELFRE: / D REX; Bust Group 2. *Rev*. hE / RE / FE / R-Đ; Reverse Group A; trefoil of pellets on each side of lozenge. Die code: *Obv*. CLo98, *Rev.* CLr106. HCR68638.
147	1.23	90°	*Hereferth. Obv.* ꝏÆLFREꝏ / D REX; Bust Group 3a. *Rev*. hER / EFE / R-Đ / MON; Reverse Group A. Die code: *Obv*. CLo99, *Rev.* CLr107. HCR68634.
148	1.25	135°	*Hereferth. Obv.* ELFRE / D RE Z+; Bust Group 3b. *Rev*. HER / EFE / R-Đ / MON; Reverse Group A; pellet on each side of lozenge. Die code: *Obv*. CLo100, *Rev.* CLr108. HCR68635.
149	1.22	150°	*Hereferth. Obv.* ELFRE / D RE; Bust Group 3b. *Rev*. hE / RE / FE / R-Đ; Reverse Group A; trefoil of pellets on each side of lozenge. Possibly same obverse die as **130**. Die code: *Obv*. CLo101, *Rev.* CLr109. HCR68632.
150	1.09	180°	*Hereferth. Obv.* +ELFRE. / D REX; Bust Group 5. *Rev*. hER / EFE / R-Đ / MON; Reverse Group A. Die code: *Obv*. CLo102, *Rev.* CLr110. HCR68633.
151	1.29	180°	*Liafwald. Obv.* ELFRE / D REX; Bust Group 1a. *Rev*. LIA / FVA / LD / MON; Reverse Group A1; pellet on each side of lozenge. Die code: *Obv*. CLo103, *Rev.* CLr111. HCR68659.
152	1.42	180°	*Liafwald. Obv.* ELFRE / D REX; Bust Group 1a. *Rev*. LIA / FVA / LD / MON; Reverse Group A1; pellet on each side of lozenge. Same obverse die as **151**. Die code: *Obv*. CLo103, *Rev.* CLr112. HCR68644.
153	1.26	90°	*Liafwald. Obv.* A / ELFRE. / D REX; Bust Group 1a. *Rev*. LIA / FVA / LDꝏ / MON; Reverse Group A; pellet on each side of lozenge. Die code: *Obv*. CLo104, *Rev.* CLr113. HCR68643.
154	1.31	270°	*Liafwald. Obv.* ÆLFREꝏD REX M, inscription starts at shoulder; Bust Group 1a. *Rev*. LIA / FVA / LDM / ONE; Reverse Group A1; pellet on each side of lozenge. Die code: *Obv*. CLo105, *Rev.* CLr114. HCR68622.
155	1.22	45°	*Liafwald. Obv.* ÆLFREꝏD REX M, inscription starts at shoulder; Bust Group 1a. *Rev*. LIAF / VAL / DMO / ¯Ta; Reverse Group A1; pellet on each side of lozenge. Same obverse die as **154**. Die code: *Obv*. CLo105, *Rev.* CLr115. HCR68645.
156	1.22	90°	*Liafwald. Obv.* ELFRE / D REX; Bust Group 2. *Rev*. LIA / FVA / LD / MON; Reverse Group A; pellet on each side of lozenge. Die code: *Obv*. CLo106, *Rev.* CLr116. HCR68641.
157	1.37	45°	*Liafwald. Obv.* +ÆLFRED / REX ZA; Bust Group 4b (var). *Rev*. LIOB / VALꝏ / DMO / NETA; Reverse Group B. Die code: *Obv*. CLo107, *Rev.* CLr117. HCR68563.
158	1.47	90°	*Liafwald. Obv.* +ELFRED / REX ZAI; Bust Group 6. *Rev*. LI / OF / VA / LD; Reverse Group A; cross arms end in hooked motif. Die code: *Obv*. CLo108, *Rev.* CLr118. HCR68642.
159	0.10 fragment	225°	*Liafwald. Obv.* EL[ ]. Bust Group uncertain. *Rev*.[] FV[ ] ; Reverse Group uncertain. Die code: *Obv*. CLo109, *Rev.* CLr119. HCR68674.

PLATE 7

145 146 147 148 149 150

151 152 153 154 155 156

157 158 159 160 161 162

163 164 165 166 167 168

Plate 7 (cont.)

	Weight (g)	*Die Axis*	
160	1.26	0°	*Ludig. Obv.* **ELFRE: / D REX**; Bust Group 1a. *Rev.* **LV / DI / G. / MON**; Reverse Group A; pellet on each side of lozenge. Die code: *Obv*. CLo110, *Rev.* CLr120. HCR68564.
161	1.31	0°	*Ludig. Obv.* **ELFRE: / D REX**; Bust Group 1a. *Rev.* **LV / DI / G. / MON**; Reverse Group A; pellet on each side of lozenge. Same dies as **160**. Die code: *Obv*. CLo110, *Rev.* CLr120. HCR68653.
162	1.29 chipped	270°	*Ludig. Obv.* **ELFRE: / D REX**; Bust Group 1a. *Rev.* **LV / DI / G. / MON**; Reverse Group A; pellet on each side of lozenge. Same dies as **160**. Die code: *Obv*. CLo110, *Rev.* CLr120. HCR68647.
163	1.36	270°	*Ludig. Obv.* **ELFRE: / D REX**; Bust Group 1a. *Rev.* **LV / DI / G᛭ / MON**; Reverse Group A. Same obverse die as **160**. Die code: *Obv*. CLo110, *Rev.* CLr121. HCR68651.
164	0.81 fragment	180°	*Ludig. Obv.* **ELFR**[ ]**REX**; Bust Group 1a. *Rev.* [ ]/ **DI / G᛭** /[ ]; Reverse Group A. Same obverse die as **160**. Die code: *Obv*. CLo110, *Rev.* CLr122. HCR68654.
165	1.26	0°	*Ludig. Obv.* **ELFRE: / D REX**; Bust Group 1a. *Rev.* **LV / DI / G᛭ / ᛭**; Reverse Group A; pellet on each side of lozenge. Same obverse die as **160**. Die code: *Obv*. CLo110, *Rev.* CLr123. HCR68650.
166	1.26	270°	*Ludig. Obv.* **ELFRE: / D REX**; Bust Group 1a. *Rev.* **LV / DI / G᛭ / ᛭**; Reverse Group A; pellet on each side of lozenge. Same obverse die as **160**; same reverse die as **165.** Die code: *Obv*. CLo110, *Rev.* CLr123. HCR68652.
167	1.24 chipped	270°	*Ludig. Obv.* **ELFRE: / D REX**; Bust Group 1a. *Rev.* **LV / DI / G᛭ / ᛭** (pellet in each angle of cross); Reverse Group A; pellet on side of lozenge in quarters 1 and 3. Same obverse die as **160**. Die code: *Obv*. CLo110, *Rev.* CLr124. HCR68649.
168	1.26	0°	*Ludig. Obv.* **ELFRE / D REX**; Bust Group 1a. *Rev.* **LV / D. / IG / MON**; Reverse Group A. Die code: *Obv*. CLo111, *Rev.* CLr125. HCR68648.

Alfred the Great (Cross-and-Lozenge cont.).

Winchester Style

	Weight (g)	*Die Axis*	
169	1.23 badly chipped	180°	*Burgred. Obv.* +ÆLFRE / D REX SAX. *Rev*. BVR / GR[ ] / DMO / NETX; Reverse Group A; Cross arms type 3. Die code: *Obv*. CLo112, *Rev.* CLr126. HCR68583.
170	1.11 chipped	0°	*Burgred. Obv.* +ÆLFRE / D REX SAX. *Rev*. BVR / GRE / DMO / NETX; Reverse Group A; Cross arms type 3. Same dies as **169**. Die code: *Obv*. CLo112, *Rev.* CLr126. HCR68581.
171	1.45	135°	*Dunna. Obv.* +ÆLFR / ED REX[ ]. *Rev*. DVN / NX / MON / ETX; Reverse Group A; trefoil of pellets on each side of lozenge; Cross arms type 3. Die code: *Obv*. CLo113, *Rev.* CLr127. HCR68606.
172	0.95	180°	*Dunna. Obv.* ELFR / ED REX. *Rev*. DVN / NXM / ONE / TX⁂; Reverse as Canterbury Style 3; Reverse Group B; Cross arms type 2. Die code: *Obv*. CLo114, *Rev.* CLr128. HCR68538.
173	1.33	195°	*Eadelm. Obv.* ⁂+ÆLFRE / D REX. *Rev*. EXD / ELM / MON / ETX; Reverse Group A; Cross arms type 2. Die code: *Obv*. CLo115, *Rev.* CLr129. HCR68607.
174	1.37	135°	*Heahstan. Obv.* +ÆLFRE / D REX SX. *Rev*. HEX / HSTX / NMO / NETX; Reverse Group A; pellet on each side of lozenge; Cross arms type 3. Die code: *Obv*. CLo116, *Rev.* CLr130. See also: 89 (Canterbury style). HCR68724.
175	1.40	150°	*Heahstan. Obv.* +ÆLFRE / D REX SX. *Rev*. HEX / HSTX / NMO / NETX; Reverse Group A; pellet on each side of lozenge; Cross arms type 2. Die code: *Obv*. CLo117, *Rev.* CLr131. See also: 89 (Canterbury style). HCR68627.
176	1.41	30°	*Luceman. Obv.* +ÆLFR / ED REX. *Rev*. LVC / EM / AN / MO¯; Reverse Group A; pellet on each side of lozenge; Cross arms type 3. Die code: *Obv*. CLo118, *Rev.* CLr132. HCR68537.
177	1.39	270°	*Luceman. Obv.* +ÆLFR / ED REX X. *Rev*. LVE / MX / NMO / NET; Reverse Group A; pellets on each side of lozenge in quarters 1,2 and 4; trefoil of pellets on side of lozenge in quarter 3; Cross arms type 3. Die code: *Obv*. CLo119, *Rev.* CLr133. HCR68646.
178	1.38	315°	*Wulfred. Obv.* +ÆLFRE / D REX SX. *Rev*. PVL / FRE / DMO / NETX; Reverse Group A; Cross arms type 2. Die code: *Obv*. CLo120, *Rev.* CLr134. HCR68672.
179	1.32	225°	*Wulfred. Obv.* +ÆLFRE / D REX SX. *Rev*. VVL / FRE / DMO / NETX; Reverse Group A; trefoil of pellets on each side of lozenge; Cross arms type 2. Die code: *Obv*. CLo121, *Rev.* CLr135. HCR68673.
180	1.07	225°	*Eacceh? Obv.* +XER / DRE or +XLFR / DRE. *Rev*. [ ]EX / XC / EИ / M⁂; Reverse Group B; Die code: *Obv*. CLo122, *Rev.* CLr136. Possible imitation. HCR68676.

PLATE 8

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Plate 8 (cont.)

'West Mercian' Style

	Weight (g)	*Die Axis*	
181	1.22	345°	*Dudecil. Obv.* ✝ÆLFR / ED REX ZA; *Rev*. DVD / LEC / ILM / ONE; Reverse Group B; trefoil of pellets on side of lozenge in quarters 2 and 4. Die code: *Obv*. CLo123, *Rev.* CLr138. HCR68605.
182	1.27 chipped	135°	*Ec[ ]. Obv.* ✝ELFRE✝ / D R[ ]Λ. *Rev*. EC[ ] / (H[ ]Đ) / MON / [ ]TΛ. Reverse Group B1; pellet on each side of lozenge. Die code: *Obv*. CLo124, *Rev.* CLr139. HCR68675.
183	1.45 chipped	180°	*Ethelred. Obv.* ✝ÆLFRE / D REX SΛ. *Rev*. E-ÐE / RED / MON / ETΛ; Reverse Group A. Die code: *Obv*. CLo125, *Rev.* CLr140. HCR68619.
184	1.17	315°	*Hea[ ] Obv.* ✝ΛELFRED R S; inscription starts at shoulder. *Rev*. HE / ΛV(L) / [ ] / ⁂O⁂ (inscription begins with symbol akin to Thor's Hammer; first M inverted); Reverse Group B; Die code: *Obv*. CLo126, *Rev.* CLr141. HCR68624.
185	1.38	180°	*Lulla. Obv.* ÆLFRED / REX. *Rev*. LVL / LΛ / MON / ETΛ; Reverse Group A; pellet on each side of lozenge. Die code: *Obv*. CLo127, *Rev.* CLr142. HCR68655.
186	1.34	210°	*Lulla. Obv.* ÆLFRED / REX. *Rev*. LVL / LΛ / MON / ETΛ✝; Reverse Group B1. Same obverse die as **185**. Die code: *Obv*. CLo127, *Rev.* CLr143. HCR68656.
187	1.29	90°	*Lulla. Obv.* ✝ΛELFRED REX ZΛ; inscription starts at shoulder. *Rev*. ✝LV / LLΛ / MON / ETΛ; Reverse Group A. Die code: *Obv*. CLo128, *Rev.* CLr144. HCR68657.
188	1.26 chipped	135°	*Regingild. Obv.* ✝ÆLFRED REX SΛX; inscription starts at shoulder. *Rev*. ✝REGI / NGIL / DMON / ETΛ✝ (cross formed of five pellets); Reverse Group A1. Die code: *Obv*. CLo129, *Rev.* CLr145. HCR68658.
189	1.24	90°	*Wibearht. Obv*. ✝ELFRE / D REX Z; cross in front of bust. *Rev*. ✝VV / IB· / EΛ· / ·RHT; Reverse Group A; trefoil of pellets on each side of lozenge. Die code: Obv. CLo130, Rev. CLr146. HCR68565.
190	1.09	90°	*Wibearht. Obv*. ⁂✝⁂ELFRE / D REX; trefoil of pellets in front of face. *Rev*. ✝VV / IB· / EΛ· / ·RHT; Reverse Group A; trefoil of pellets on each side of lozenge. Same reverse die as **189**. Die code: Obv. CLo131, Rev. CLr146. HCR68671.

Unassigned Cross-and-Lozenge

191	*Uncertain moneyer. Obv.* [ ]LFRE[ ]; inscription starts at shoulder. *Rev*. [ ]ΛL/[ ]. Die code: Obv. CLo132, Rev. CLr147. HCR68722.
192	*Uncertain moneyer. Obv.* [ ]RE[ ]. *Rev.* [ ](L)IΛ/[ ]. Die code: Obv. CLo133, Rev. CLr148.

ALFRED THE GREAT (cont.)

Two-Line/ Horizontal coinage (*c.* 879/80–99) (North 636): London

Obv. Small cross pattée in plain inner circle.
Rev. Moneyer's name in two lines

193	1.38 chipped	270°	*Dealing Obv.* ÞEL FR ED RE. *Rev*. DEAL / ÆLING. London. HCR68544.

UNCERTAIN ISSUER

Cross and Lozenge coinage (*c.* 875–79)

Obv. Diademed bust right, inscription outside within outer pellet circle.
Rev. Small cross pattée or saltire within central lozenge; cross bar at each angle cutting line to edge of inscription; all within outer pellet circle.

	Weight (g)	*Die Axis*	
194	0.33	210°	*Uncertain moneyer. Obv.*. [ ]L[ ] (probably Ceolwulf); London Style; Bust Group 6. *Rev*. [ ]LDM; Reverse Group B. Die code: Obv. CLo134; Rev. CLr149. HCR68726.
195			*Liafwald/Liofwald? Obv.* [ ]REX. *Rev.* [ ]FVA[ ]. Die code: Obv. CLo135; Rev. CLr150.
196			*Uncertain moneyer. Obv.*. [ ]EX. *Rev.* [ ]Æ[ ] (letter inverted). Die code: Obv. CLo136; Rev. CLr151. Orientation uncertain. HCR68721.
197			*Uncertain moneyer. Obv.*. [ ]. *Rev.* [ ]N/[ ]. Possibly forms part of coin 57 (Ceolwulf II). Orientation uncertain.
198			*Uncertain moneyer. Obv.*. [ ]. *Rev.* [ ]A[ ] (letter inverted). Orientation uncertain.
199			*Uncertain moneyer*. [ ]V[ ]; [ ]I[ ]. Orientation and side of coin uncertain.
200			*Uncertain moneyer*. [ ]V[ ]; [ ]A[ ]. Orientation and side of coin uncertain.
201			*Uncertain moneyer*. [ ]D[ ]; [ ]X[ ]. Orientation and side of coin uncertain. Not illustrated. Listed as part of HCR68722.

PLATE 9

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Carolingian Franks

Christiana Religio coinage: Italian Series (Mint: Pavia)

Obv. Cross within a plain inner circle; inscription around.
Rev. Temple surmounted by cross; inscription around.

Louis II the Younger (855–75)

202 1.62 0° *Obv.* HIVDOVVICVS IMP. *Rev.* XRISTIANA RIIICIO. *MEC* I, no. 1008. HCR68723.

Charles the Bald (875–7)

203 1.58 90° *Obv.* H CAROLVS IMPER. *Rev.* XPI[ ]TIANA REICIO. *MEC* I, no. 1009; Gianazza 2013, 61, no. 1. HCR68545.

Table 11.2. Summary of the die codes and catalogue numbers for each issuer by coin type.

Ruler	Type	Die numbers (obverse)	Die numbers (reverse)	Coin numbers
ARCHBISHOP ÆTHELRED	Cross-and-Lozenge	CLo1 – Clo2	CLr1 – CLr2	1 – 2
CEOLWULF II	Cross-and-Lozenge (London)	CLo3 – Clo41	CLr3 – CLr43	6 – 58
ALFRED	Cross-and-Lozenge (Transitional, London)	CLo42 – Clo45	CLr44 – CLr47	69 – 72
	Cross-and-Lozenge (Canterbury)	CLo46 – Clo68	CLr48 – CLr73	73 – 103
	Cross-and-Lozenge (London)	CLo69 – Clo111	CLr74 – CLr125	104 – 168
	Cross-and-Lozenge (Winchester)	CLo112 – Clo121	CLr126 – CLr135	169 – 179
	Cross-and-Lozenge (West Mercian)	Clo122 – Clo131	CLr136 – Clr146	180 – 190
	Cross-and-Lozenge (Unassigned style)	CLo132 – Clo133	CLr147 – CLr148	191 – 192
UNCERTAIN RULER	Cross-and-Lozenge (Unassigned style)	CLo134 – Clo136 (NB not all coins given die numbers)	CLr149 – CLr151 (NB not all coins given die numbers)	194 – 201
CEOLWULF II	Two Emperors	TEo1 – TEo3	TEr1 – Ter3	3 – 5
ALFRED	Two Emperors	TEo4 – Teo12	TEr4 – TEr12	59 – 68
ALFRED	Horizontal Two-line	n/a	n/a	193
CAROLINGIAN	Christiana Religio	n/a	n/a	202 – 203

Appendix 1

A revised checklist of finds of *Two Emperors* and *Cross-and-Lozenge* type coins

Compiled by John Naylor

Alongside the corpus of Two Emperors and Cross-and-Lozenge type coins in the Watlington Hoard, other examples in museum collections (many published through the Sylloge of Coins of the British Isles series) or recorded via online databases such as the Portable Antiquities Scheme and the Corpus of Early Medieval Coin Finds have been an important resource for this project. The aim of this appendix is to bring a checklist of non-Watlington Hoard coins from these varied sources together with those included in Mark Blackburn and Simon Keynes' corpus (Blackburn and Keynes 1998), thus producing as complete a list as possible to date (October 2020). All entries contain basic information regarding ruler, type, bust style/subtype, moneyer and findspot (where known). Detailed information can be found in the original publication place. I have also noted die links with coins in the Watlington Hoard and have updated information regarding style/classification as a result of research undertaken for this volume (see Naylor, Chapter 5, 6 and Catalogue 2).

Note, however, that I have not included any of the coins from the 'near Leominster' Hoard, found in 2015 and unreported as potential 'treasure' under the Treasure Act 1996. The case came to trial in late 2019 and only around 30 coins of an estimated 300 have so far been recovered. The hoard is discussed in Chapter 9 but too little information on the retrieved coins is currently known to include them in this list.

Abbreviations

BK = Blackburn and Keynes 1998 [listed here with corpus number, e.g. BK 1]
EMC = Corpus of Early Medieval Coin Finds <https://emc.fitzmuseum.cam.ac.uk/>
PAS = Portable Antiquities Scheme <https://finds.org.uk/database>
SCBI 68 = C.S.S. Lyon 2016. *The Lyon Collection of Anglo-Saxon Coins* (Sylloge of Coins of the British Isles 68). Oxford: Oxford University Press for British Academy.

TWO EMPERORS

	Ruler	*Moneyer*	*Bust style*	*Findspot*	*Ref*
1	Alfred	Beagstan	Group 1	Castle Camps (Cambridgeshire)	PAS SF-06FF49; EMC 2019.0279
2	Alfred	Cenred	Group 2	Croydon Palace (Surrey)	BK 5
3	Ceolwulf II	Ealdwulf	Group 2	Cuerdale hoard (Lancashire)	BK 6

CROSS-AND-LOZENGE

Transitional Style (London?)

	Ruler	*Moneyer*	*Findspot*	*Ref*	*Notes*
4	Alfred	Ethe[ ]?	Southampton (excavations 1949)	BK 7	Same style as **cat. 2.69–72**. Previously listed as '*Two Emperors* or *Portrait-Quatrefoil/Cross-and-Lozenge*' mule.

Canterbury Style

	Ruler	*Moneyer*	*Obverse/ Reverse style*	*Findspot*	*Ref*	*Notes*
5	Alfred	Burgnoth	A/1	Cuerdale hoard (Lancashire)	BK 9	
6	Alfred	Burgnoth	A/1	Roxby cum Risby (North Lincolnshire)	PAS NLM-124D04; EMC 2012.0231	
7	Alfred	Diarmund	A/3	Unknown	BK 10	Die-linked to **cat. 2.78**.
8	Alfred	Diarmund	B/5	Canterbury	BK 11	
9	Alfred	Ethelred	B/4	Unknown	BK 12	
10	Alfred	Guthhere	B/4	Washington (Sussex) hoard	BK 13	Die-linked to **cat. 2.88**.
11	Alfred	Tirwald	A/1	Cuerdale hoard (Lancashire)	BK 14	
12	Alfred	Tirwald	B/5	Unknown	SCBI 68 no 607; Blackburn 2003 no 14A	Die-linked to **cat.2. 93**.
13	Alfred	Torhtmund	Cii/6	Cuerdale hoard (Lancashire)	BK 15	Re-assigned from Canterbury Style B
14	Archbishop Æthelred	Ethelmund	A/1	Thames Exchange site, London	BK 17	
15	Archbishop Æthelred	Ethelmund	A/1	Unknown	BK 18	

16	Archbishop Æthelred	Ethelmund	A/2	Unknown	BK 16	
17	Archbishop Æthelred	Ethelmund	A/2	Melbourn (Cambridgeshire)	EMC 2017.0064	
18	Archbishop Æthelred	Torhtmund	A/1	Near Tetbury (Gloucestershire)	BK 19	

London Style

	Ruler	*Moneyer*	*Sub-style*	*Findspot*	*Ref*	*Notes*
19	Alfred	Ciolwulf	1a?/1	Rochester Castle, Kent	BK 20	
20	Alfred	Ciolwulf	5/A	Cuerdale hoard (Lancashire)	BK 21	
21	Alfred	Ciolwulf?	1a?/?	Cuerdale hoard (Lancashire)	BK 22	
22	Alfred	Hereferth	1a/A	'near' Wye (Kent)	BK 23	
23	Alfred	Hereferth	1a/A	Winchester (Hampshire)	EMC 2010.0241	
24	Alfred	Hereferth	2/A	Cuerdale hoard (Lancashire)	BK 24	Die links: obverse **cat. 2.144**; reverse **cat. 2.145**.
25	Alfred	Hereferth	5/A	Washington (Sussex) hoard	BK 25	
26	Alfred	Liafwald	1a/A	Cuerdale hoard (Lancashire)	BK 26	
27	Alfred	Liafwald	1a/A	Unknown	BK 27	
28	Alfred	Liafwald	1b/A	Unknown	BK 28	
29	Alfred	Liafwald	1a/A	Cuerdale hoard (Lancashire)	BK 29	
30	Alfred	Liafwald	1a/A	Cuerdale hoard (Lancashire)	BK 30	
31	Alfred	Liafwald	1a/A	Cuerdale hoard (Lancashire)?	BK 31	
32	Alfred	Liafwald	6/A	Unknown (possibly from Pitstone hoard)	Blackburn 2003 no. 59A	
33	Alfred	Liafwald	Uncertain (not illustrated)	Silverdale hoard (Lancashire)	PAS LANCUM-65C1B4	
34	Alfred	Eadulf?	?/A	St Paul's churchyard, London	BK 32	
35	Alfred	Eadulf	6/A	Cuerdale hoard (Lancashire)	BK 59	Reassigned to London Style from 'other styles'
36	Ceolwulf II	Beagstan	3b/B	Linton (Cambridgeshire)	EMC 2005.0108	

37	Ceolwulf II	Cuthulf	6/A	Washington (Sussex) hoard	BK 60	Reassigned to London Style from 'other styles'
38	Ceolwulf II	Dealing	2/A	Possibly Ireland	BK 33	
39	Ceolwulf II	Dudecil	2/A	Cuerdale hoard (Lancashire)	BK 34	Die-links (obverse and reverse) to EMC 2020.0225 (next entry).
40	Ceolwulf II	Dudecil	2/A	'Wiltshire Downs'	EMC 2020.0225	Die-links (obverse and reverse) to BK 34 (previous entry).
41	Ceolwulf II	Eanred	Bust unassigned: akin to Portrait-Quatrefoil	Pitstone (Buckinghamshire)	PAS BUC-08EE42; EMC 2004.0009 (illustrated in Figure 8.3)	Halfpenny; probably belongs with other Cross-and-Lozenge coins from Pitstone Hoard
42	Ceolwulf II	Liafwald	1a/A	Unknown	SCBI 68: no 605; Blackburn 2003 no 34A	Die-links (obverse and reverse) to **cat. 2.34**.
43	Ceolwulf II	Liafwald	2/A	Cuerdale hoard (Lancashire)	BK 35	
44	Ceolwulf II	Liafwald	2/B	Unknown	BK 36	
45	Ceolwulf II	Liafwald	3/B	Cuerdale hoard (Lancashire)	BK 37	
46	Ceolwulf II	Liafwald	3/B	Pitstone hoard (Buckinghamshire)	BK 38	
47	Ceolwulf II	Liafwald	3/B	Pitstone hoard (Buckinghamshire)	BK 39	
48	Ceolwulf II	Liafwald	4/B	Pitstone hoard (Buckinghamshire)	BK 40	Die links: obverse **cat. 51**; reverse: **cat. 2.49–50**.
49	Ceolwulf II	Liafwald	4/B	Cuerdale hoard (Lancashire)	BK 41	Die links: obverse **cat. 2.51**; reverse: **cat. 2.49–50**.
50	Ceolwulf II	Oswulf	3b/B	Tenterden (Kent)	EMC 2016.0179	

Winchester Style

	Ruler	*Moneyer*	*Reverse style*	*Findspot*	*Ref*	*Notes*
51	Alfred	Dunna	Type 1	Cuerdale hoard (Lancashire)	BK 42	
52	Alfred	Dunna	Type 2	Cuerdale hoard (Lancashire)	BK 43	
53	Alfred	Dunna	Type 1	'near Winchester' (Hampshire)	Blackburn 2003 no. 42A	
54	Alfred	Eadelm	Type 2	Cuerdale hoard (Lancashire)	BK 44	
55	Alfred	Ethlem[ ]	Type 2?	Cuerdale hoard (Lancashire)	BK 45	

56	Alfred	Heahstan	Type 2 (originally listed in BK1998 as Type 1 but this appears to be in error)	Cuerdale hoard (Lancashire)	BK 46	Die-link obverse and reverse to **cat. 2.175** and EMC 2016.0034.
57	Alfred	Heahstan	Type 2	'near Alfriston' (East Sussex)	EMC 2016.0034	Die-link obverse and reverse to **cat. 2,175** and BK 46.
58	Alfred	Heahstan	Type 3	Cuerdale hoard (Lancashire)	BK 47; SCBI 68 no. 606	
59	Alfred	Heahstan	Unknown (no illustration exists)	Cuerdale hoard (Lancashire)	BK 48	
60	Alfred	Luceman	Type 3	Washington (Sussex) hoard	BK 49	
61	Alfred	Luceman	Type 3	Stanton St John, Oxfordshire	BK 50	
62	Alfred	Wulfred	Type 2	Cuerdale hoard (Lancashire)	BK 51	Die-link obverse and reverse to **cat. 2.179**.
63	Alfred	Wulfred	Type 2	'Norfolk'	EMC 2006.0299	
64	Ceolwulf II	Dunna	Type 3	Morley St Peter hoard (Norfolk)	BK 52	

Unassigned/'West Mercian' styles

	Ruler	*Moneyer*	*Findspot*	*Ref*	*Notes*
65	Alfred	Lulla	Cathedral Green, Winchester (Hampshire)	BK 53	Roman-style bust, related perhaps to the Winchester Style
66	Alfred	Lulla	Cuerdale hoard (Lancashire)	BK 54	Roman-style bust, related perhaps to the Winchester Style
67	Alfred	Lulla	Bawsey (Norfolk)	BK 55	'Watlington Hoard' type bust?
68	Alfred	Lulla	Jewry Street, Winchester (Hampshire)	EMC 2009.0123	Roman-style bust, related perhaps to the Winchester Style. Mint listed as 'Winchester?' on EMC.
69	Alfred	Regingild	Unknown	BK 56	
70	Alfred	Regingild	Upwich, Droitwich (Worcestershire)	BK 57	
71	Alfred	[ ]lf	Cuerdale hoard (Lancashire)	BK 58	

Uncertain

	Ruler	*Moneyer*	*Findspot*	*Ref*
72	Uncertain	Uncertain	Unknown	BK 61

Appendix 2

A visual summary guide to the classification of the *Two Emperors* and *Cross-and-Lozenge* type pennies

John Naylor

The guide presented here summarises the classification of the Two Emperors and Cross-and-Lozenge type pennies discussed and presented in detail in Chapter 5 and used in the presentation of the coinage in Catalogue 2. For variations within groups see Chapter 5.

Note: the inscriptions listed here include the main spellings used and some variations. Elements within brackets may be included entirely or in part.

Two Emperors type	*OBVERSE*	*REVERSE*
Issuers: Alfred Ceolwulf II *Obv.* Diademed bust right, inscription outside within outer pellet circle. *Variations:*	+ÆLFRED REX ÆNGLO(+) (+)CEOLVVF REX M(ER)	moneyer's name MONETA, e.g. BEAGSTAN MONETA
Style 1: Roman style drapery (Alfred)		
Style 2: Roman style drapery (Ceolwulf II)		
Style 3: Triangular shoulders enclosing lines or curves; various motifs on breast		
Style 4: Drapery gathered at central annulet		

Style 5: Rounded shoulders enclosing two parallel vertical lines and horizontally-placed curving line; horizontal lines above vertical line on breast.	Not illustrated (seen in Leominster Hoard)	
Rev. Two emperors seated; winged angel (Victory) above.		

Cross-and-Lozenge type	*OBVERSE*	*REVERSE*
General description: *Issuers:* Alfred Ceolwulf II Archbishop Æthelred	*Obv.* Diademed bust right	*Rev.* Cross pattée/saltire within central lozenge; cross bar at each angle cutting line to edge of inscription
Transitional Style *Issuer:* Alfred	+ÆLFRED REX ΣΛ(X)	moneyer's name MONETΛ
Obv. Right-facing bust with simple drapery formed of two side panels and a central panel (akin to the Lunettes type) within plain or beaded inner circle.		
Canterbury Style *Issuer:* Alfred Archbishop Æthelred	(+ΛΛ+)ELFRED REX E+ÐERED ΛRCHIEPI⁻	+moneyer's name + moneyer's name MONE (v. rarely)
Style A: Neat bust, most with simple Lunettes type drapery; long near-vertical diadem with straight or angled ties; almond-shaped eye; neat curving cap of hair.		
Style B: Narrow-faced bust, simple Lunettes type drapery; often with large chin pellet; open hair ending in pellet; short diadem.		
Style C: Bust with simple, Lunettes or Roman-style drapery; long straight diadem; almond-shaped eye.	Ci Cii	

Reverse types: Rev. 1: plain double outer circle (A only) Rev. 2: as 1, crescents at end of cross arms (A only)		rev. 1 rev. 2
Rev. 3: plain single outer circle, crescents at end of cross arms (A only) Rev. 4: quatrefoil (A and B)		rev. 3 rev. 4
Rev. 5: cross arms end in lis (B only) Rev. 6: standard Cross-and-Lozenge type (C only)		rev. 5 rev. 6

Cross-and-Lozenge type	*OBVERSE*	*REVERSE*
London Style *Issuers:* Alfred Ceolwulf II	(✝)ELFRED RE(X ZA) (✝)ÆLFRED RE(X ΣA(X)/ΣM/M) (✝)CIOLVVLF RE(X M) (✝)CEOLVVLF REX (M)	moneyer's name (MONETA)
Style 1: Roman-style drapery, two panels to left, one to right (sometime *vice versa* or three panels to left); long diadem; most have annulet on right shoulder; neat hair, round or square in shape.		
Style 2: Roman-style drapery, one panel each side, flat face and nose; annulet on shoulder: Ceolwulf (never), Alfred (rarely); long diadem.		
Style 3: Roman-style drapery of two panels, left over right or *vice versa*. Main style without annulet on shoulder; long diadem.		
Style 4: three-quarter turned bust with neat but simple Roman-style drapery, annulet on one or both shoulders; neat, long face; neat hair.		
Style 5: Lunettes-style drapery, occasionally an annulet on right shoulder; varied portraits.		

Style 6: Lunettes-esque drapery of two ladder-like sides panels and a central annulet; straight, short diadem; straight hair ending in pellets; looping eyebrow/nose.		
Style 7: unique coin; fan-shaped drapery on breast, annulet on left shoulder, narrow panels of two lines each side; large almond-shaped eye, neat hair cap; diadem of large pearls.		
Reverse types A: saltire at centre of lozenge (A1: pellet in each angle of saltire)		
B: cross at centre of lozenge (B1: pellet in each angle of cross)		

Cross-and-Lozenge type	*Obverse*	*Reverse*
Winchester Style *Issuers:* Alfred Ceolwulf II	+ÆLFRED REX (ΣΛ) +CEOLVVLF R	moneyer's name (MONETA)
Obverse style (general): Roman-style bust with long diadem; drapery neat and detailed, some variation overall generally more detail on left than right side; most have annulet on both shoulders. Faces mostly long with pointed chin.		
'West Mercian' Style *Issuers:* Alfred	+ÆLFRED RE(X ΣΛX / ZΛ) +ELFRED REX (Z)	+moneyer's name (MONETA+)
Group 1 Ladder-like side drapery gathered to central annulet (most examples); long, straight diadem; high curving eyebrow/ nose; large, round eye. Some examples crude.		
Group 2 Similarities with Winchester Style but lacking quality and detail in the die cutting.		

Appendix 3

The moneyers of the *Two Emperors* and *Cross-and-Lozenge* type pennies

			Cross & Lozenge			
Moneyer	***Two Emperors***	***Transitional Style***	***Canterbury Style***	***London Style***	***Winchester Style***	***West Mercian Style***
Beagstan	X			X		
Berneah				X		
Bernulf				X		
Biarnred			X	X		
Burgnoth			X	X		
Burgred					X	
Burgwald				X		
Cenred	X	X		X		
Ciolwulf				X		
Cuthberht	X					
Cuthulf				X		
Cynelm				X		
Dealing	X			X		
Diarmund			X			
Dudecil	X			X		X
Dunna					X	
Eacceh?						X
Eadelm					X	
Eadulf	X		X	X		
Ealdwulf	X					
Eanred	X	X		X		
Ec[ ]						X
Ecgulf				X		
Ethlem[ ]					X	
Ethelgar			X			
Ethelmund			X			
Ethelred		X	X			X
Ethelstan				X		
Ethelwulf			X			
Guthhere			X			
Hea[ ]						X
Heahstan		X	X		X	

Heawulf	X			X		
Herebald				X		
Hereferth	X			X		
Liafwald				X		
Luceman					X	
Ludig				X		
Lulla						X
Oswulf				X		
Regingild						X
Tirwald			X			
Torhtmund			X			
Wibearht			X			X
Wulfred					X	

Appendix 4

Concordance table showing the spellings of moneyer's names

Name spelling used in catalogue following Blackburn & Keynes 1998	Late West Saxon spelling as used in, e.g., SCBI volumes
Beagstan	Beagstan
Berneah	Beornheah
Bernulf	Beornwulf
Biarnred	Beornræd
Burgnoth	Burgnoth
Burgred	Burgræd
Burgwald	Burgweald
Cenred	Coenræd
Ciolwulf	Ceolwulf
Cuthberht	Cuthbeorht
Cuthulf	Cuthwulf
Cynhelm	Cynehelm
Dealing	Dealing
Diarmund	Deormund
Dudecil	Dudecil
Dunna	Dunna
Eacceh?	not previously listed
Eadelm	Eadhelm
Eadulf	Eadwulf
Ealdwulf	Ealdwulf
Eanred	Eanræd
Ec[ ]	n/a
Ecgwulf	Ecgwulf
Ethelgar	Æthelgeard
Ethelmund	Æthelmund
Ethelred	Æthelræd
Ethelstan	Æthelstan
Ethelwulf	Æthelwulf
Guthhere	Guthhere
Herebald	Herebeald
Hea[ ]	n/a
Heahstan	Heahstan
Heawulf	Heahwulf
Hereferth	Hereferth
Liafwald	Leofweald
Luceman	Luceman
Ludig	Ludig
Lulla	Lulla
Oswulf	Oswulf
Regingild	Ragngeld
Tirwald	Tirweald
Torhtmund	Torhtmund
Wulfred	Wulfræd
Wibearht	Wibeorht

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